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ABSTRACT

During 1997-1998, the Florida Education and Employment Council for Women and Girls has continued an analysis of strategies to assist all Florida women in achieving self-sufficiency. As part of that effort, the council examined registered apprenticeship programs as an avenue of on-the-job training offering women, as well as men, high-skilled, high-wage employment and health and welfare benefits for workers and families. Council members interviewed workers, business and apprenticeship representatives and analyzed key issues pertaining to the benefits, accessibility, and barriers to women and other minority groups participating in registered apprenticeships in greater numbers. The study found that some of the barriers exist in the schools, with fewer girls participating in mathematics and science classes, some are internal to the women, and others are societal or work related. Exemplary programs for women in nontraditional occupations were identified. The council set the following goals: (1) increase the number of young women in secondary schools who take advanced courses in mathematics, science, technical and vocational courses, particularly in areas nontechnical for their gender; (2) increase the number of young women who leave high school who proceed into trades and technical education, particularly into registered apprenticeships; and (3) increase the number of mature women who select apprenticeships as "second chance" occupational training. (The report contains 66 references. Seven appendixes include the following: a glossary of terms; council membership and programs; information on programs for single parents, displaced homemakers, and single pregnant women; gender equity programs; legislation; and resources.) (KC)

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ED 428 185

# REGISTERED APPRENTICESHIPS IN NONTRADITIONAL OCCUPATIONS FOR FLORIDA'S WOMEN:

## Accessing Opportunities and Overcoming Barriers

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1998 Annual Report
Florida Education and Employment Council for Women and Girls

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## LETTER TO COMMISSIONER OF EDUCATION

The Honorable Tom Gallagher
Commissioner of Education
Department of Education
Tallahassee, Florida 32399

Dear Commissioner Gallagher:

On behalf of the Florida Education and Employment Council for Women and Girls, I am pleased to present to you our ninth Annual Report. For nearly ten years, the Council has focused its efforts on issues of great importance to the women and girls of Florida.

During 1997-1998 the Council's activities have continued an analysis of strategies to assist all women of Florida to achieve self-sufficiency for themselves and their families. The 1998 Annual Report examines registered apprenticeship programs as an avenue of on-the-job training offering women, as well as men, high-skilled, high-wage employment and health and welfare benefits for the worker and her family. Council members interviewed workers, business and apprenticeship representatives; researched, studied, and analyzed key issues pertaining to the benefits, accessibility, and barriers to women and other minorities participating in registered apprenticeships in greater numbers.

We believe that only training and employment in occupations paying a living wage will ultimately solve the problems posed by welfare reform. Training in viable occupations will ensure that women and their children live free of poverty and the dangers that accompany poverty. Since traditionally female occupations are among the lowest paying work available, it makes sense for women to examine occupations that are nontraditional for their gender. Overcoming barriers—both internal and external—to successful entry into registered apprenticeships is an important prerequisite to attaining many of these nontraditional positions. Some of the barriers exist in the schools themselves and the lesser participation of girls in mathematics, science, and technology classes.

Our research has led us look to these goals:

- To increase the number of **young women in secondary schools** who take advanced courses in math, science, technical and vocational courses, particularly in those areas usually considered nontraditional for their gender.
- To increase the number of **young women who leave or graduate from secondary schools** who proceed into trades and technical education, particularly registered apprenticeships.
- To increase the number of **mature women** who select apprenticeships as "second chance" occupational training.

We would like to thank you and your department for the opportunity to serve you, and we look forward to serving you in the future as we study issues that impact women and girls of this great state. We appreciate your continued support as well as that of Joseph Stephens, Director of the Division of Workforce Development, and Barbara Gershman, Vocational Education Gender Equity Administrator.

Very respectfully,

Janie Gooden Greenleaf, D.P.A.
Director of the Institute for Professional Development
Barry University
Chair

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## PREFACE

Most single-paycheck families are headed by a woman. It is critical that her paycheck is written in a sufficient sum to support herself and her children without reliance on outside help.

One of the best sources of adequate pay for a woman who lacks a four-year degree comes from participation in a registered apprenticeship. Whether a union or non-union apprenticeship, usually she will be paid higher-than-average wages while learning her trade. Almost from the beginning she will receive health and other benefits, the lack of which has driven many working women onto welfare during health and other family crises.

The majority of apprenticeable occupations can be found in construction and related trades which, despite governmental encouragement, have not experienced a rise in female employment beyond about two percent of the workforce. Most of the women in construction entered only after their traditionally female jobs failed adequately to support their families.

Registered apprenticeships in construction trades and other nontraditional occupations for women could be THE SOLUTION for welfare reform. Individuals lacking the basic math, reading and other skills necessary to pass entry exams could enter a pre-apprenticeship, some of which also pay good wages and, in time, offer benefits.

Can a woman perform dirty work, heavy lifting? Consider the answer quoted in this report from a television's *60 Minutes* interview: "I was a certified nursing assistant before I did this. I got paid minimum wage, and I lifted 150 to 200 pounds of deadweight on a regular basis."

Our society would gain economically and socially if female-headed households increased their representation in registered apprenticeships in the trades. It will take, however, the efforts of educators, counselors, social workers, governmental education and labor agencies, and, of course, the apprenticeships themselves to make it happen.

We hope you will do your part to implement recommendations presented in this ninth annual report of the Florida Education and Employment Council for Women and Girls. (Refer to Appendix B for membership of the Council.)

Barbara Gershman

Barbara Gershman
Gender Equity Administrator
Florida Department of Education

## INTRODUCTION

Three years ago at the beginning of Welfare Reform, the Florida Education and Employment Council for Women and Girls began investigating the effects of the changes wrought by this legislation on women and children who represent the vast majority of people on welfare. The result of that study culminated in the 1996 Annual Report, *Investing in Florida's Women and Children: Implications and Recommendations for Workforce Development and Welfare Reform*. One of the important issues that arose from that study was the shortage of affordable, high-quality child care not only for women moving from welfare to work, but for the working poor, and for all working families in Florida. The 1997 Annual Report, *Two-Generational Approach to Child Care—Investing in Florida's Workers and Their Children: Issues, Implications and Recommendations for Preschool and School-Age Child Care* presented the Council's work in that area.

In a continuing effort to investigate issues relevant to women for attaining a living wage to assure a quality life for themselves and their children, the Council has been studying various job-training programs. This report focuses specifically on registered apprenticeships in occupational trades, especially those that are nontraditional for women. After investigating registered apprenticeships, the Council found that although the tradition of apprenticeships has existed since early European trade guilds, they are not well publicized in this country and are not being accessed by women in particular. (Refer to Appendix C for the program of the Council for 1997-1998.)

Registered apprenticeships represent a significant opportunity for women to earn a living wage in a system that allows them to "earn while they learn." Despite the fact that registered apprenticeships could fulfill the employment and educational needs of many women as well as the requirements for employment for the Welfare Reform Act, few women are opting to participate. This report attempts to understand the reasons why few women are entering registered apprenticeships and what actions could be undertaken to assist women in accessing these apprenticeships in the future.

This report includes a review of relevant data, research studies, and articles related to apprenticeships and particularly women's participation in registered apprenticeship programs. It is important that a common set of definitions are employed in the discussion and understanding of apprenticeships. To that end the Council has compiled a glossary of terms used in this report. (Refer to Appendix A.)

The Council acknowledges the following individuals for their contribution to this publication:

*Carol J. Darling, Ph.D.*, University of Central Florida, former Executive Director and contributing author

*Lisa Koll*, Graduate Assistant and contributing author, University of Central Florida

*Kathleen McKenzie*, Executive Director of the Florida Education and Employment Council for Women and Girls, author and photographer

*Steven E. Sorg, Ph.D.*, Interim Assistant Vice President and Director of Distributed Learning, University of Central Florida

*Brenda Ulewicz*, Graduate Assistant and contributing author, University of Central Florida

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*Donna Beasley*, LET Specialist, Apprenticeship Section, Jobs and Benefits Office, Bradenton

*Jamie Buck*, Executive Director, Academy of Construction Trades, Orange County, Orlando

*J. Joseph Daly*, Training Director, Jacksonville Electrical Joint Apprenticeship and Training Committee, Jacksonville

*Jamie Fugate*, Program Director, Florida Electrical Apprenticeship and Training

*Hon. Doug Jamerson*, Former Secretary of Labor, State of Florida

*Richard Melton*, Bureau of Apprenticeship and Training, U.S. Department of Labor, Jacksonville

*Kris Pike*, General Manager, Armstrong Brothers Plumbing, Bradenton

*Janet Skipper*, Administrator, Central Florida Joint Training Association, Inc., Winter Park

*Rhonda Sparks*, Training Coordinator, Florida Center for Manufacturing Excellence, Bradenton

*Joseph Stephens*, Jobs and Benefits Office, Department of Labor, Tallahassee

*Jerry M. Thomas*, Training Director, Jacksonville Plumbers and Pipefitters Joint Apprenticeship and Training Trust, Jacksonville

*A special thank you is extended to the Journeymen, apprentices and preapprentices who graciously granted permission to print photographs and interview materials appearing in this report and to Janet Skipper, Administrator, Central Florida Joint Association, Inc. who facilitated the interviews and photography of these women.*

## RECOMMENDATIONS

Based on the findings and information that the Council gathered this year, the following recommendations are presented.

**Recommendations for Educators**

1. Provide a developmental, non-stereotyped, career guidance program.
2. Provide for females and minorities early experiences in tool use, nontraditional career exploration and teamwork.
3. Educate teachers and guidance counselors in nontraditional career explorations, experiences, and counseling.
4. Enforce those sections of the School-to-Work Opportunities Act that emphasize the enablement of women, minorities, and individuals with disabilities to prepare for careers that are not traditional for their gender, race, or disability.
5. Educate business and community partners in ways to encourage women, minorities, and individuals with disabilities to participate in School-to-Work activities nontraditional for their gender, race, or disability.
6. Educate guidance counselors about all opportunities for postsecondary education available to students, including registered apprenticeships and other nontraditional occupational training.
7. Encourage teachers to participate in externships in various businesses and industries.
8. Train teachers in proven strategies to create female and minority friendly classrooms in science, math, and technology.
9. Provide opportunities for apprenticeship programs, unions, mentors, and employers to make outreach presentations in the schools.
10. Develop and promote additional programs linking secondary schools and community colleges with registered apprenticeship programs.

**Recommendations for Apprenticeship Programs, Unions, and Employers**

1. Set recruitment goals equal to one half the percentage of the local female workforce; make aggressive outreach plans; and monitor progress to increase the number of women and minorities in nontraditional registered apprenticeship programs.
2. Create a public information program that includes outreach to schools; participation in career fairs; announcements in the media; presentations to groups of women and girls in various settings; and posting information and announcements at churches, libraries, employment centers, public assistance offices, community centers, laundromats, doctors' and attorneys' offices.
3. Use gender neutral language and feature women of diverse backgrounds working in nontraditional occupations in brochures, posters, annual reports, and internet homepages.
4. Encourage and help women develop support groups.
5. Monitor job assignments to ensure that all apprentices have the full range of work experiences.
6. Conduct pre-employment testing which is free of gender and racial bias to measure an individual's skill, aptitude, and interest for nontraditional work.

7. Sponsor pre-apprenticeship programs to remedy the deficits of applicants who do not meet apprenticeship entry requirements.*
8. Have clear and posted policies on sexual harassment with a specified means for reporting and redress of which all personnel are aware .*
9. Provide support services and a supportive work environment.*
10. Maintain a database of women available for work.*
11. Maintain equitable hiring criteria and fair training and advancement practices.*
12. Recruit women to leadership positions and for trainers and teachers.*
13. Provide clean, separate and locked toilets, hand washing and changing facilities.*
14. Sponsor orientation sessions for women interested in the trades.*
15. When possible place more than one women on a work crew.*
16. Support family issues of child care, pregnancy disability, family leave, fringe benefits and affirmative action.*
17. Assist with child care during evening class meetings.

**Recommendations for the Bureau of Apprenticeship and Training and for State Apprenticeship Councils**

1. Maintain, support and expand opportunities for women in apprenticeships by supporting the continuance of the Bureau of Apprenticeship and Training.
2. Enforce regulations already in existence and budget for effective monitoring.*
3. Develop an outreach program and press for the attainment of the goals and timetables for enrolling women and minorities in apprenticeship programs and in nontraditional occupations.
4. Work for child care solutions that accommodate women and men in occupations with nontraditional working schedules.
5. Provide technical assistance to apprenticeship programs and employers on recruiting, training, and employing women and minorities.*
6. Record and publish up-to-date data on apprenticeship programs disaggregated by the trade, gender, race, ethnicity and age and including rates of attrition.*

**Recommendations for the Office of Federal Contracts Compliance Programs**

1. Enforce regulations already in existence and budget for effective monitoring.*
2. Meet regularly with women's groups to exchange ideas and experiences with contractors.*
3. Coordinate with other governmental agencies in their efforts to provide equitable workplaces for women.*
4. Prior to bid awards for large projects, review contractors' compliance history.*
5. Report to the public at regular intervals on the numbers of women working on large projects as well as the number of hours they have worked.*

*These recommendations were advocated by Chicago Women in Trades (CWIT) in *Breaking New Ground: WORKSITE 2000.*

## Rosie the Riveter

More than fifty years ago, as men went into the armed forces engaged in World War II, over six million young and not-so-young women took their places in heavy war-production industries. In shipyards and aircraft plants and 19 other key industries, "Rosie the Riveter" and her compatriots performed the duties of eight of every ten jobs normally done by men. Women became welders, machinists, and aircraft builders.

Lasting social change was brought about by women working, not only out of the home, but also at jobs that had long been considered to belong to men. A few companies, realizing the double burden of women with families, instituted specific on-site services such as child care centers, shopping, laundry, repair, and food services providing take home meals. While women were paid only 50 percent of what men earned, "Rosie the Riveter" was the beginning of the women's movement in industry (American Airpower Heritage Museum, 1998).

## Why Women Enter Nontraditional and Apprenticeable Occupations

Researchers asked a number of women in nontraditional occupations "an open-ended question about what attracted them to these occupations." It is not surprising that 72 per cent said it was "primarily the money, because women in the trades have an average wage of almost twice the national average wage of female workers at the time of the interview." Twenty-four percent indicated that they were "primarily attracted to the work itself. They mentioned liking to work with their hands, preferring to work outdoors, and the satisfaction they got from actually creating a product. One woman…said that she liked the lifestyle and the sense of community…" (Schroedel, 1987, p. 248).

Other research indicates that women who choose nontraditional work enjoy a high degree of work satisfaction and that nontraditional jobs better enable women to support themselves and their families. Researchers have identified this profile of successful female workers in nontraditional occupations:

- Love of learning
- Willingness to take on new challenges
- Interest in working with one's hands
- Interest in seeing concrete products of one's work
- Desire to be role model for one's children
- Desire to earn higher wages and benefits (Workplace Solutions, 1998)
- In good physical health and fitness
- Need to earn more than $6.00 per hour to support self and family
- Need access to health care and other benefits
- Willingness to explore new things, new places, new people (Illinois Women in the Trades, 1998).

In "Hard and Heavy," a *60 Minutes* report on women in the construction trades, Ronnie Sandler, who began construction work as a flagger 26 years ago, became a carpenter, and then developed training programs for other women, stated:

I was with a woman who had come through my training program in Vermont, and we were testifying before a Senate committee…because we were trying to get a…goal set for women in construction. And one of the senators…said, 'Honey, isn't this work too heavy and too hard and too dirty for you to be doing?' And she looked at him and said, 'Senator, I was a certified nursing assistant before I did this. I got paid minimum wage, and I lifted 150 to 200 pounds of deadweight on a regular basis as I cared for people. And no one ever asked me if the work was too heavy and too dirty. But now that I'm a carpenter and making $14 an hour, everybody wants to know if the work is too heavy and too hard. And it's not as heavy or as dirty as being a certified nurses' assistant (Hartman, 1998).

Leslie Stahl in the same *60 Minutes* report spoke to a number of women in the trades:

***Stahl:*** Women don't even like walking past a construction site. Why would they want to work on one? Well, to paraphrase the famous line, 'It's the money, stupid'. Trina, a bricklayer—what's the hourly wage?

***Trina Mack:*** It's…a little over $26 an hour now.

***Stahl:*** Geri, electrician?

***Geri Shelton:*** Electricians in our local [union], 134, make $28.65 an hour. That's not counting your benefits and your pension package.

***Stahl:*** Anita?

***Anita Nichols:*** I'm a carpenter in Cleveland, so it's $23.
I couldn't raise my son without my job.
I couldn't have my house without my job.
I couldn't buy a new car without my job.
The money I make is my independence.
Why would I want to go work somewhere for $8 or $9 an hour when I can work for $23 an hour and have the type of home life…I want to have?

***Susan Hagan:*** This is just an incredible opportunity for women to be able to support their children (Hartman, 1998).

The Women's Bureau of the Department of Labor reports, "Families maintained by women had the lowest median income of all family types in 1991—$16,692—when compared with $40,995 for married-couple families and $28,351 for families maintained by men. In 1991 white families maintained by women had a median income of $19,547; for similar black families, $11,414; and for comparable Hispanic-origin families, $12,132. In 1992 women who maintained families also had lower median weekly earnings than other single-earner families." (U.S. Department of Labor, Women's Bureau, 1993).

The most important variable determining one's earnings—for both men and women—was not education, but one's choice of occupations. This effect, which was found in a study by Gray and Huang (1993), was even more significant and pronounced for women than for men. Breaking down gender barriers to higher paying occupations and occupational training is necessary for women to increase their income.

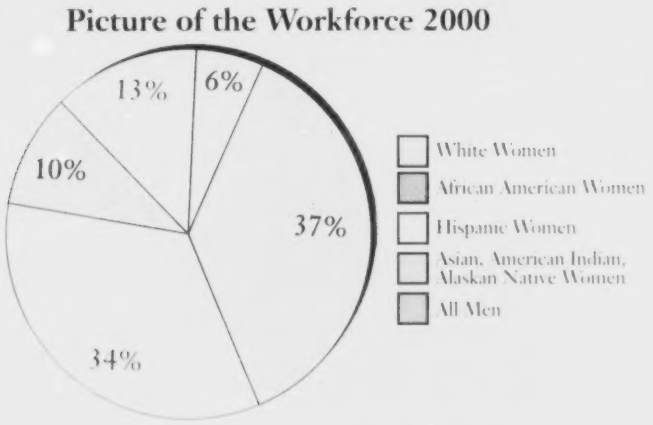
## Women and Minorities in Apprenticeships in Florida

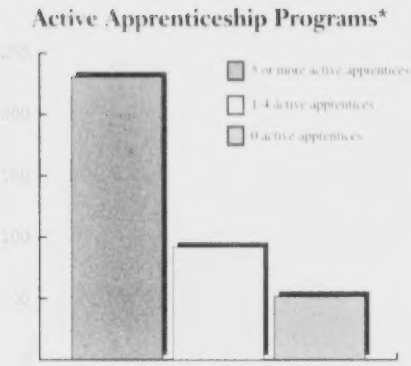
The Bureau of Job Training, Apprenticeship Section, in the Florida Department of Labor reported on December 15, 1998, that there are 14,572 active registered apprentices in Florida programs. Of these, 10 percent are

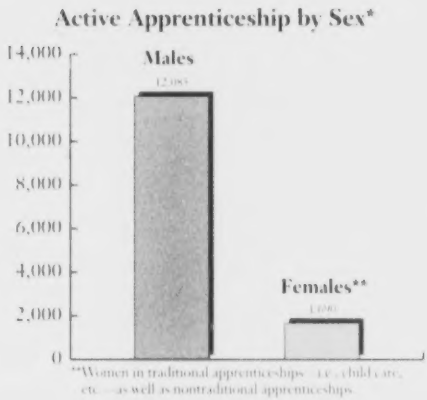
**Laura Feaster**, an Intermediate Journeyman Electrician, is about to take her test for certification. Laura had been an electrician in the Navy. She married, had a son, divorced, did jobs in retail and daycare. Laura knew she needed to make more money to support son. In 1993 she chose something she enjoys—the electrical trade. These are some of the qualities she enjoys about her job: "I like to work outside and I don't mind getting dirty." Laura says she has no physical difficulties with the work and has found her opportunities equal or better than men's because she's a willing and hard worker. Laura would like to eventually become a traveling electrician, which she can do in the Union.

Laura recommends that apprenticeship representatives talk to girls in high school to introduce them to trades.

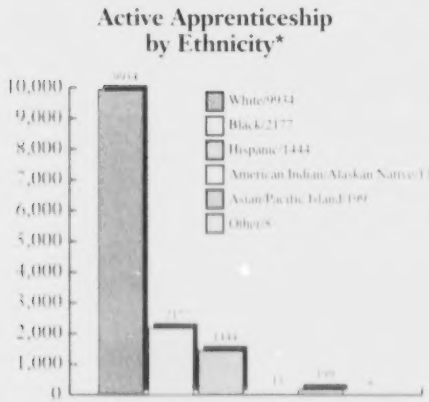
females including women in traditional—i.e., child care and health as well as nontraditional apprenticeships—and 29 percent belong to a minority, including 16 percent African American and 12 percent Hispanic. "These individuals are involved in day-to-day structured training programs that consist of classes and on-the-job experience. Florida apprenticeship programs are graduating more than 300 individuals a month" (Jamerson, 1998). Susan Eisenberg, author of *We'll Call You If We Need You: Experiences of Women Working Construction* (1998), has called women in the building trades "permanent pioneers".

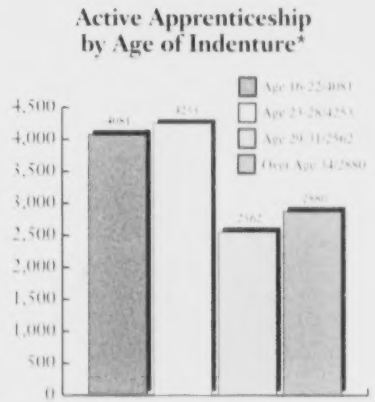



**Women in traditional apprenticeships—i.e., child care, etc.—as well as nontraditional apprenticeships.




*Data collected from the Florida Department of Labor and Employment Security, Division of Jobs and Benefits, July 24, 1998.

Lesley Stahl in the previously mentioned *60 Minutes* report, "Hard and Heavy" stated, "Almost a third of all lawyers and doctors in America are now women. Nearly 20 percent of police officers are women, and half of the white-collar managers. But you'd have to look under a lot of hard hats before you'd find a woman on a construction site."

"When Anita [Nichols] first braved a job site in the '70's, women were just under two percent of the construction work force. Two decades later, that's virtually unchanged—just over two percent" (Hartman, 1998). The U.S. Department of Labor (1997) reports that women represent 2.7 percent of journeymen in construction trades.

Women—and minorities—are underrepresented in the apprenticeable trades and in registered apprenticeship programs. "Women's underrepresentation in traditionally male, skilled, blue-collar jobs is important for two reasons. First, female poverty—which stems partly from the low pay of traditionally female jobs—is a growing social problem; integrating women without college degrees into fairly high-paying, traditionally male jobs would be a major step toward rectifying this problem. Second, to the extent that women's small numbers are the result of barriers in getting hired into these jobs, principles of fairness dictate the need to remove the barriers" (Cleveland, 1996).

"Employment and training programs designed to smooth the operation of the labor market, enhance the productivity of low-income workers, and open opportunities for employment and advancement can alleviate the plight of the working poor. The acquisition of job skills and work experience are often essential for workers seeking access to higher-paying jobs. The primary shortcoming of such training efforts has been that they spread too little money among too many trainees, with the result that few are in training long enough for it to make a sufficient impact on their posttraining wages" (Levitan, S.A., Mangum, G.L. & Mangum, S.L., 1998). This is not the case, however, with registered apprenticeships, which provide a living wage while training is ongoing.

"Effective enforcement of antidiscrimination legislation is also required to ensure that opportunities for advancement and self-sufficiency are not closed on the basis of race, sex, age, disability, or national origin" (Levitan, et al, 1998, p.29).

## Welfare Reform

(For an extended discussion of this topic, see *Investing in Florida's Women and Children: Implications and Recommendations for Workforce Development and Welfare Reform*, 1996 Annual Report, Florida Education and Employment Council for Women and Girls.)

The National Governors Association, in an Issues Brief entitled *Strategies to Promote Education, Skill Development, and Career Advancement Opportunities for Low-Skilled Workers* (1998), notes, "Approaches that combine education and job skill training with work to make work a learning experience hold the most promise for providing low-skilled workers with the tools they need to progress beyond entry-level, low-wage positions."

Julie Strawn (1998) in meta-analysis research of the two most commonly tried welfare-to-work strategies—quick employment programs and skill building programs—found that, "The research clearly shows that the most successful programs have been found…with mixed strategies of employment and skill building services." Strawn adds, "Rather than seeing employment and building skills as competing goals, the research suggests that policy makers should make a wide variety of employment, training, and other services available in support of a clear employment goal, and allow local

flexibility in deciding which services are most appropriate for which people.

Registered apprenticeships provide an opportunity—perhaps one that is too often overlooked—for women moving from welfare to work.

In discussing welfare reform and apprenticeship programs these comments were made by female construction workers interviewed by Leslie Stahl in "Hard and Heavy," a *60 Minutes* report:

***Ronnie Sandler:*** When Welfare-to-Work came along, we were like, 'Perfect. Here we are. We're the answer, or one of the answers.'

***Stahl:*** And, as I understand it, it's almost never proposed.

***Sandler:*** You're right. You're absolutely right. We have spent, in this country, millions and millions of dollars to train women to stay poor....Most job training programs and Welfare-to-Work programs train women to be clerks in stores, certified nursing assistants, or day-care workers. (Hartman, 1998).

## Laws Affecting Workforce Development and Welfare Reform

Under Florida's welfare reform act, Work and Gain Economic Self-sufficiency (WAGES), registered apprenticeships would fulfill the "work first" requirement and combine training and education in a work program.

**Countable Work Activities.** The following activities may be used individually or in combination to satisfy the work requirements for a participant in the WAGES Program (4.4, Florida Jobs and Benefits, 1998).

A. Unsubsidized employment

B. Subsidized private sector employment and subsidized public sector employment; subsidies include:
   a. Work supplementation (grant diversion) and
   b. On-the-job training

C. Community service work experience

D. Work experience (must include education and training)

E. Job search and job readiness assistance (employment preparation)

F. Vocational education or training (within limitations);

G. Job skills training directly related to employment (customized training);

H. Education services related to employment for participants 19 years of age or younger (restricted to those who have not completed high school or obtained a GED and activity shall be coordinated with School-to-Work activities);

I. Attendance at a high school or GED program for participants 19 years of age or younger; and

J. The provision of child care services by a WAGES participant for another WAGES participant who is participating in Community Service Work Experience.

Registered apprenticeships, because they entail work for pay from a private entity, fit the requirements of welfare reform (see A. above). Unfortunately many current welfare recipients can not meet the prerequisites to enter a registered apprenticeship program. Pre-apprenticeships would bridge this gap in education, training, and employability skills. (See D, E, F, and G above).

Many women—particularly those on welfare—are seeking a second chance in the areas of education and employment. Unsuccessful choices in early life present barriers, but the right training and work experiences would allow them to become truly self-sufficient. "A sound [second-chance program] would select occupations substantial enough to provide adequate incomes,

fund training sufficient to prepare for them, and require performance commensurate with success. Involved would be integrated recurrent and simultaneous combinations of basic education, skill training, and on-the-job application" (Levitan, Mangum & Mangum, p. 230).

Registered apprenticeships offer a woman moving from welfare to work—or any woman looking for a career opportunity that would entail a living wage—a chance for promotion and health and retirement benefits for herself and her family.

After three years of detailed research on the experiences of women working in nontraditional blue-collar jobs in three metropolitan areas in California, Mary Lindenstein Walshok (1981) found, "in skilled blue-collar work, interest in a job is a result of opportunity and access to on-the-job experiences. These experiences can then develop into real competencies *and* commitment to skilled work" (p. 276).

Alexis M. Herman (1998), Secretary, U.S. Department of Labor, stated, "Welfare recipients seeking jobs—I prefer to call them 'new workers'—have the most at stake and the toughest obstacles to overcome. These new workers must struggle each and every day to achieve the dignity that comes with work; it will not be handed to them.

But even in the face of obstacles, I have learned as I've met with new workers around the country that they will struggle mightily to achieve success. Because people on welfare are just like you and me. They have the same basic hopes and fears. They want a job that brings self-worth and validation. They want to support their families and contribute to their communities. They want pride and dignity, just like those of us who have been lucky enough never to need public assistance."

Illinois Women in Trades (1998), an organization supporting women in nontraditional occupations, reports that:

- 43% of all working women are employed as clerical workers, retail salespeople, waitresses, and hairdressers, which can be classified as 'traditional' female jobs.
- Women in traditional jobs earn 20% to 30% less than women in nontraditional occupations. Such occupational segregation is the main reason why women make 73 cents for every dollar that men make.
- Many women are just as capable as men are to meet the physical demands of nontraditional work.
- Women who choose nontraditional work enjoy a high degree of work satisfaction.
- Nontraditional jobs better enable women to support themselves and their families.

"All workers, male or female, have a right to choose among a full range of occupations, not just those dictated by tradition and specialization" (Illinois Women in Trades, 1998).

**Jennifer Kenny**, a single mother, became a Journeyman Electrician in 1989 and is now a Project Supervisor. At 27 she was cleaning houses for $4.00 an hour, got a job changing out light fixtures, but was laid off in favor of an 18 year old male, but her boss said, "Jenny you'd make a damn good electrician." A neighbor called the union hall and Jennifer started right away as a helper, then entered the apprenticeship program. A small woman, Jennifer says, "A woman needs determination, not a large build."

## Children and Child Care Issues

(For an extended discussion of this topic, see *Two-Generational Approach to Child Care—Investing in Florida's Workers and Their Children: Issues, Implications and Recommendations for Preschool and School-Age Child Care*, 1996 Annual Report, Florida Education and Employment Council for Women and Girls).

The National Center for Children in Poverty (1998) reports that five million children in the United States live in poverty based on 1990 U.S.

Census Bureau's data. The Center also reports that young children still live in poverty—despite parental employment:

- In 1990 almost one out of four U.S. children under six was living below the poverty line. Their poverty rate was 23 percent.
- Children under six were more likely to be poor than any other age group.
- More than one-quarter of all poor children under six in 1990 lived with single parents who worked full-time or with married parents who together worked the equivalent of one full-time job or more.

"Not only are children the most poverty-impacted age group, but they are the most likely to remain in poverty for long periods.... Poor children have special needs over and above those that can be fulfilled through income maintenance. Preventive health care, adequate nutrition, compensatory education, and vocational training are particularly important in providing permanent exits from poverty. Not only do children in poor families suffer material deprivation but they are more likely to suffer abuse and neglect than children from more affluent families..."(Levitan, Mangum, & Mangum, p. 31).

A living wage is necessary to end the cycle of poverty. Registered apprenticeships offer self-sufficiency in an earn-while-you-learn program.

The Women's Bureau of the Department of Labor notes that, "While it is difficult for many working parents to find affordable and high-quality child care, the problem is magnified when they work non-standard hours." This is often the situation for women in apprenticeable trades. The workday often begins before standard schools and child care facilities are open, and may entail weekend work.

The Women's Bureau indicates, "The issue of child care during non-standard hours is growing in importance due to several major trends:

- Nearly one in five full-time workers—14.3 million—worked nonstandard hours in 1991.
- It has been estimated that more than 1,000 different work schedules are in use in the U.S. today.
- Sixty percent of women with children under age six and 76 percent of women with school age children are in the workforce.
- In 1991, 5 million of the full-time workers with non-standard hours—more than one in three—were women.

The problem is likely to become increasingly serious as more employers operate around the clock and as more women with children work non-standard hours. The U.S. economy is fast becoming a 24-hour operation.

For women choosing apprenticeship programs, it is often necessary for them to begin work by 7:00 a.m.—sometimes at out-of-town sites—and attend classes in the evening. These nontraditional hours pose a special child care problem for both female and male single parents pursuing apprenticeship training.

The Women's Bureau notes the development of three models of child care as promising practices:

- The single employer model: A single employer designs a child care program to fit the company's work schedule.
- The employer consortium model: A group of employers come together on an industry or geographic basis to share knowledge and may, over time, pool resources and conduct joint care projects.
- The community partnership model: A variety of stakeholders (e.g., employers, parents, providers, unions, resource organizations, local government) join together to identify community child care needs and solutions, pool resources, and share skills and expertise (Women's Bureau, 1995).

## Implications for American Business

The United States Congress makes this report regarding women, apprenticeable occupations, and nontraditional occupations in United States Code, Title 29, Chapter 27, Sec. 2501, known as the Women in Apprenticeships and Nontraditional Occupations (WANTO) Act, (a) Findings.

It states, "The Congress finds that—

1. American businesses now and for the remainder of the 20th century will face a dramatically different labor market than the one to which they have become accustomed;
2. Two in every three new entrants to the workforce will be women, and to meet labor needs such women must work in all occupational areas including in apprenticeable occupations and nontraditional occupations;
3. Women face significant barriers to their full and effective participation in apprenticeable occupations and nontraditional occupations;
4. The business community must be prepared to address the barriers that women have to such jobs, in order to successfully integrate them into the work force;
5. Few resources are available to employers and unions who need assistance in recruiting, training, and retaining women in apprenticeable occupations and other nontraditional occupations."

The (b) Purpose of the WANTO Act is described as follows:

> "It is the purpose of this chapter to provide technical assistance to employers and labor unions to encourage employment of women in apprenticeable occupations and nontraditional occupations. Such assistance will enable business to meet the challenge of Workforce 2000 by preparing employers to successfully recruit, train, and retain women in apprenticeable occupations and nontraditional occupations and will expand the employment and self-sufficiency options of women. This purpose will be achieved by—

1. promoting the program to employers and labor unions to inform them of availability of technical assistance which will assist them in preparing the workplace to employ women in apprenticeable occupations and nontraditional occupations;
2. providing grants to community-based organizations to deliver technical assistance to employers and labor unions to prepare them to recruit, train, and employ women in apprenticeable occupations and nontraditional occupations;
3. authorizing the Department of Labor to serve as a liaison between employers, labor, and the community-based organizations providing technical assistance, through its national office and its regional administrators; and
4. conducting a comprehensive study to examine the barriers to the participation of women in apprenticeable occupations and nontraditional occupations and to develop recommendations for the workplace to eliminate such barriers.

(For the complete WANTO Act, refer to Appendix F.)

## BENEFITS OF APPRENTICESHIP

**Celeste Christian** participated in the Preapprenticeship Program and has just been accepted into the Electrical Trade Apprenticeship.

She expressed satisfaction with the work because it is specialized and challenging and because there is a need for good electricians. Previously she has worked in accounting.

Celeste has two children at home who are enthusiastic about their mother becoming an electrician.

Apprenticeship has been a valued means of employment for thousands of years and has been utilized as a form of educational employment for several historical American figures including Christopher Columbus, a weaver's apprentice, and Benjamin Franklin, a printer's apprentice (Evanciew, 1994). Even today, research shows that apprenticeships are highly successful across many industries as reported by the Florida Council on Vocational Education (1992). Its research attributes the success of apprenticeships to a number of characteristics intrinsic to the apprenticeship model, including learning by doing, earning while learning, employer involvement, student commitment, and a certification of competency attainment that is recognized throughout the nation and in many foreign countries. Apprenticeship offers a number of valuable benefits to apprentices, businesses, and society as a whole.

### Benefits to Apprentices

Many benefits for apprentices have been identified through research studies and by reviewing authorities. In *A Guide to Work-based Learning Programs, Part I* (1995), the authors found that apprenticeship:

- is an efficient way to learn skills, because the training is planned and organized;
- provides apprentices earning power as they learn, since they are paid workers;
- helps to assure a good standard of living for apprentices because the training is in high demand areas;
- increases opportunities for employment and advancement to supervisory and management positions; and
- allows the student to obtain college credit toward a degree program.

Benefits vary by type of program. Each trade is different; however, most apprenticeship programs offer full health and a retirement plan, paid tuition, a progression of wages throughout the program. For example, the Jacksonville Electrical Joint Apprenticeship and Training Committee (January, 1998) has a program which supplies health and welfare benefits for apprentices and their family members as well as a defined benefit retirement plan. In addition, tuition is paid and wages increase as the apprentice gains experience. The wage schedule for an electrical apprentice with the Jacksonville Electrical Joint Apprenticeship is the following:

| | | | |
|---|---|---|---|
| First Year | $ 7.67 per hour + heath & welfare benefits | = | $ 9.35 |
| Second Year | $ 8.52 | | $10.23 |
| Third Year | $10.22 | | $11.98 |
| Fourth Year | $11.93 | | $13.74 |
| Fifth Year | $13.63 | | $15.49 |
| Journeyman pay | $17.04 per hour + benefits $4.80/hour | = | $21.84 |

Similarly, a journeyman plumber with the Jacksonville Mechanical Contractors Association receives benefits that include provided employment, a pension plan, family health insurance with dental/eyeglass coverage, and increasing wages as apprentices gain experience and licensure after completing the apprenticeship program. In this particular program, five years of on-the-

job training is combined with tuition-paid classroom instruction (Plumbers and Pipefitters Local #234, 1995). The wage schedule for the Plumbers and Pipefitters Local Union 234 is the following:

| Year | Rate/Hr | Health and Welfare | Pension | Total |
|---|---|---|---|---|
| 1st year | $ 7.27 | $2.25 | | $ 9.52 |
| 2nd year | $ 8.30 | $2.25 | $2.05 | $12.60 |
| 3rd year | $ 9.69 | $2.25 | $2.05 | $13.99 |
| 4th year | $11.07 | $2.25 | $2.05 | $15.37 |
| 5th year | $12.46 | $2.25 | $2.05 | $16.76 |

## Benefits to Employers

In a cover story entitled "Shoes to Fill: Can the Next Generation Solve Construction's Labor Crisis?" in *Source: Building Industry News and Views*, it is noted that "Conservative estimates suggest the U.S. construction industry is short by approximately 250,000 workers, who will be needed over the next few years to keep pace with commercial growth. Those aren't just any workers, mind you. They must be skilled workers. Roughly 70 percent of those jobs will require some degree of technical acumen, whether it's reading blueprints or operating special equipment.

Shifting demographics also pose serious concerns. Historically, new construction hires have been mostly men from 18 to 24 years old, but the number of available workers in this age group is declining, according to the U.S. Census figures. The competition for these young people now is more intense than ever, particularly from white-collar, high-tech industries. Factor in traditionally high attrition rates among young workers in construction, and the picture worsens" (p. 2).

Participating in apprenticeship programs provides businesses with many tangible benefits. In *A Guide to Work-based Learning Programs, Part 1* (1995), the authors found that when well planned and administered apprenticeship programs are in place, employers can expect to:

- Attract adequate numbers of highly qualified applicants
- Reduce absenteeism
- Reduce turnover
- Increase productivity
- Facilitate compliance with Federal and State Equal Employment Opportunity requirements
- Improve community relations
- Improve employee relations
- Ensure availability of related technical instruction
- Enhance problem-solving ability of craftworkers, and
- Ensure versatility of craftworkers.

## Benefits to the State of Florida and Society

As the Florida Council on Vocational Education pointed out in *The Benefits of Apprenticeship: Implications for Public Policy in Florida* (1992), apprenticeship is a means of dealing with the problem of American decline when competing in the international marketplace. Gitter and Scheuer (1997) state that labor market difficulties that youths face in America today hinder the future economic success of our nation. They suggest that a well-trained workforce is vital to the United State's ability to compete in the international market as a

**Susan Anderson**, a participant in the Preapprenticeship Program, had been working as an electrician's helper for one month. Susan has worked as a drug and alcohol counselor, a cashier, and in assembly work.

Susan has chosen the electrical trade for the benefits and money, which can make her self-supporting. She will be able to care for herself and her children.

Susan says she likes the work "because she gets to use her hands and learn new things every day." She has recommended the program to her sister.

She said the qualities a woman needs are motivation and a desire to better yourself.

high-productivity, high-wage country. The authors state that "youths who gain work experience and receive on-the-job training will reduce both the chances of future labor bottlenecks and the burden that might be imposed on others to pay for their support" (p. 16).

Similarly, Professor Steven Hamilton addressed this problem in his article "Apprenticeship for Adulthood" when he noted that "apprenticeship in various forms represents a strategic investment because it simultaneously meets employers' needs and contributes to strengthening schools" (as cited in F/COVE, 1992, p. 3). He further noted that "West Germany's apprenticeship system demonstrates that with opportunities for training, relevant school learning, and access to adult jobs, young people are capable of assuming adult work roles much sooner than is common in the United States" (as cited in F/COVE, 1992, p. 3). Apprenticeship programs provide a wealth of opportunity to enhance America's position in the global marketplace.

The Council on Vocational Education (1992) noted the following benefits of apprenticeship programs to the state of Florida:

- Transforming Florida from a low-wage to a high-wage economy.
- Meeting international competition.
- Meaningful work for non-college bound students.
- Strategic investment that meets employers needs and strengthens schools.
- Making young people capable of assuming adult work roles much sooner.
- Expanding the supply of well-trained workers.
- Narrowing the workforce earnings gap.
- Creating an incentive for young people to stay in school and live a life free of crime, drugs, and teen pregnancy.
- Providing meaningful work.
- Creating economic impact—greater lifetime earnings with parallel greater taxes paid and greater purchasing power for other goods and services.
- Greater job satisfaction among workers.

## REMOVING BARRIERS TO WOMEN'S PARTICIPATION IN NONTRADITIONAL OCCUPATIONS AND APPRENTICESHIPS

Susan Eisenberg, in *We'll Call You If We Need You: Experiences of Women Working Construction*, states that, "the promise created by Executive Order 11246, that access to these higher paid blue-collar jobs would create a viable career option for a significant number of women has not been realized. For women, the pioneering phase of breaking into union construction was not followed by a critical mass of settlers. Instead, pioneering, contrary to its meaning, became a seemingly permanent condition" (p. 4).

Career exploration, recruitment, placement, and retention must be aggressively planned and implemented to help assure women's success in nontraditional occupations and registered apprenticeships. Strategies to address barriers women face prior to and during nontraditional employment must be thoughtfully developed and implemented by employers, unions, and educational institutions. (For a list of Single Parent, Displaced Homemaker, Single Pregnant Women, and Gender Equity Programs in Florida, refer to Appendix D and E.)

The following are **potential barriers and obstacles presented with effective parallel solutions** to assist women in these careers:

### Lack of Knowledge of Traditionally Male Occupations

Since women are not traditionally exposed to tools, machines, the trades, or other nontraditional occupations while they are growing up, they often lack knowledge about these careers and the traits necessary for success. Armed with knowledge about the benefits of nontraditional occupations and the skills that they already possess, more women would consider an occupation that is nontraditional for their gender.

Women who find themselves in dead-end jobs, low-paying jobs, jobs which provide little satisfaction and few boosts to their self-confidence, and women who dislike office work can find solutions to these frustrations by exploring nontraditional occupations. Women who work in the trades, apprenticeships, and technical jobs describe their careers as rewarding, fulfilling, challenging, and economically sufficient to support themselves and their families.

Programs introducing nontraditional occupations to girls and women must include accurate information about the realities of these jobs. In addition, women should conduct a self-evaluation of their interests and skills to make an informed decision. Women considering nontraditional jobs should evaluate themselves on the following characteristics that current women workers report are necessary:

- A love of learning
- A willingness to take on new challenges
- An interest in working with their hands
- A desire to see concrete products of their work
- A desire to be role models for their children
- A desire to earn higher wages and benefits (Workplace Solutions, 1998).

Women frequently need to be prodded about past experiences in the workplace and at home to identify the skills they possess that are useful in nontraditional occupations. A self-evaluation should include an assessment of:

- Skills acquired in traditional female occupations and their hobbies and interests which entail skills that are transferable to nontraditional training programs and jobs

**Marjorie Earwood**, a Project Manager, was the first woman in St. Petersburg Local and the youngest, finishing at age 22. Marjorie has been working in electric trade 20 years after learning about apprenticeships from a girlfriend's brother. She was accepted at her first interview and says she's not sure she would have persisted if she hadn't been. Marjorie is now on the Local Apprenticeship Committee.

When asked about problems, Marjorie commented: "You have to prove yourself at each new job site. There was a reluctance to trust my competence at first. Bosses were willing to teach, but wanted to overprotect me and it was difficult when I had to follow a woman who was less than professional on a job."

Marjorie said that to be a successful apprentice, one had to "have a willingness to work, be adaptable to change, and not think in the ordinary, but out of the box."

Marjorie added that, girls lack experience with tools and recommends exposure in school. Too many girls lack fathers in their lives to teach them the things her father taught her: how to use tools, how to change a flat tire.

- Knowledge of household repairs, painting, small appliance repairs, gardening, farming, bus and truck driving, car repairs, hand tools, and following a pattern (Workplace Solutions, 1998).

## Recruitment and Retention Strategies

**Employers and unions** are encouraged to utilize the following strategies to recruit potential women workers:

- Set goals and monitor progress to increase the number of women in nontraditional jobs
- Ensure that employee or membership recruiters know the facts about working women and are supportive of women entering nontraditional work
- Interact with training programs, community-based organizations, pre-apprenticeship programs, and secondary and postsecondary vocational education that identify and/or train women for nontraditional occupations to ensure that the training matches available jobs
- Dispel myths about gender, race, and sexual orientation for staff, union members, and for potential female workers
- Announce in the media, run advertisements, and hold orientation sessions and tours for diverse groups of women who are interested in learning about opportunities in nontraditional jobs; feature women who are currently in the organization
- Offer pre-employment programs to provide individuals with the skills necessary to apply for available jobs
- Send women in nontraditional jobs to make presentations at high schools, colleges, training programs, and cultural events that reach women
- Participate in career fairs and feature women in nontraditional jobs
- Announce opportunities at churches, libraries, employment centers, public assistance offices, community centers, laundromats, doctors' and attorneys' offices
- Act as a resource for internships, field trips, and mentoring for women training in nontraditional fields related to entry-level jobs
- Feature women of diverse ethnic backgrounds working in nontraditional occupations in brochures, posters, annual reports, and Internet homepages
- Provide specific information in personnel materials about available nontraditional jobs, such as job titles and salary ranges
- Encourage current female workers to recommend qualified female applicants
- Access sources of tradeswomen who are available for work
- Develop a recruitment film which depicts women in nontraditional jobs
- Conduct pre-employment testing which is free of gender and racial bias to measure an individual's skill, aptitude, and interest for nontraditional work, and
- Encourage women in traditional jobs in the company and union to consider and explore nontraditional jobs (Workplace Solutions, 1998).

Workplace Solutions, an organization that provides technical assistance to employers and unions to assist in the successful integration of women into nontraditional jobs, recommends that the following key points be addressed when presenting nontraditional job options to women:

- Describe potential jobs in detail, indicating the entry-level wage and career advancement opportunities, and describe the training necessary to obtain these jobs, the length of training, the cost if any, support services available, and entry-level training requirements.
- Explain the apprenticeship system. Most Americans—but women in particular—are unfamiliar with this method of training.
- Offer to put the client in touch with role models working in nontraditional jobs.
- Discuss both the benefits and barriers for women working in nontraditional jobs. Let the client decide what is best for her.
- Assist the client in overcoming her math fears, if necessary. Many women are afraid of doing math, but once they start doing it again as an adult, come to enjoy it.
- Mention the possibility of joining a support group for women who are in nontraditional training and jobs. If the client is interested in pursuing nontraditional work, but is afraid her family and friends will not support her decision, let her know that other support systems are available. (Workplace Solutions, 1998)

Encouraging girls and women to consider nontraditional occupations is the responsibility of schools, employers, and unions. They can help women assess transferable work and home skills, interests, and aptitudes. They can provide sources of information on various nontraditional careers, the demand for employees in particular fields, and pre-employment skills, such as job search, resume writing, and preparation for interviews. They can provide nontraditional women teachers to serve as role models. School counselors, teachers, employment and union recruiters can describe the many advantages of careers in the skilled trades. *Hard Hats, Boots and Goggles* (1986) lists some of the advantages.

- Craft workers not only receive high pay and good benefits, they also have the personal satisfaction of creating or repairing something tangible. Seeing immediate results heightens self-respect and job satisfaction.
- Skilled trade jobs pay more than "women's work." Salaries can double within just a few years. These facts make it possible for a woman to support a family adequately.
- Skilled trade workers can choose to relocate, work part-time, or even return to the job after an absence of several years (p. 93).

## Pre-employment Information

Advocates for women's entry and retention in nontraditional jobs offer methods to overcome some of the barriers women face. Openly discussing potential barriers produces a realistic picture of the job and the workplace. The following topics should be addressed prior to a woman's entry into a nontraditional job or apprenticeship:

- The mathematics and other academic and physical requirements of the occupation
- The duties and workplace conditions of the occupation
- Safety procedures and health concerns
- Entry-level jobs and the opportunities for advancement

- Ways to access information about job openings
- Information about apprenticeships and unions
- Introduction to the tools and machines used on the job
- Possible undesirable job assignments, hostile supervisors and co-workers
- Stereotypes and attitudes about women who enter jobs traditionally held by men
- Strategies for dealing with difficult people, and
- Possible discrimination in hiring, layoffs, treatment, training and advancement opportunities.

## A Good Start in the Workplace

An employer or training program that truly wants to integrate women into nontraditional jobs can alleviate potential problems by strongly asserting its commitment to women workers. Helping them learn their job and strategies to deal with workplace problems will assist in retaining female employees. The following activities promote a supportive environment for newly hired women:

- Hold employee orientations to provide new hires with an insider's look at the company by sharing company values, policies, expectations, and climate. For union apprenticeship programs, orientations should provide an overview of the training program, including information on how apprentices are graded.
- Provide information to all employees on the formal and informal rules and regulations on the job, including company policies supporting women in nontraditional jobs and prohibiting discrimination and sexual harassment.
- Facilitate interaction with co-workers to ensure that women have the opportunity to familiarize themselves with the work environment (Workplace Solutions. Orientation, 1998).
- Emphasize commitment to women in nontraditional jobs to assist them to obtain the skills they need to do their jobs and to be treated fairly and professionally by all employees.
- Feature women role models from different ethnic and racial backgrounds who are working in nontraditional jobs.
- Outline the steps to promotion.
- Provide an overview of job responsibilities, facilities, tools and equipment, and safety requirements.
- Remind the on-site manager/supervisor of policies to create a supportive environment for all women hires.
- Review the facilities, equipment, and uniforms of the worksites where women are assigned to ensure that the basic requirements are in place before they begin employment (Workplace Solutions, 1998).

## Governmental Acts and Agencies

### Department of Labor

Executive Order 11246 and 11478, Part II Nondiscrimination in Employment by Government Contractors and Subcontractors, states, "The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, or national origin. Such action shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or

recruitment advertising, layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship."

In 1978 the Department of Labor mandated in 29 CFR 30.4 *Outreach and Positive Recruitment* actions which "would reasonably be expected to increase minority and female participation in apprenticeship" and which would include:

- Dissemination of information concerning the nature of the apprenticeship, requirement for admission, availability of opportunities, sources of applications, and the equal opportunity policy of the sponsor.
- Participation in annual workshops conducted by employment services agencies for the purpose of familiarizing school, employment service and other appropriate personnel with the apprenticeship system and current opportunities therein.
- Cooperation with local school boards and vocational education systems to develop programs for preparing students to meet the standards and criteria required to qualify for entry into apprenticeship programs.
- Internal communication of the sponsor's equal opportunity policy in such a manner as to foster understanding, acceptance, and support among the sponsor's various officers, supervisors, employees, and members to encourage such persons to take the necessary action to aid the sponsor in meeting its obligations under this part.
- Engaging in programs such as outreach for the positive recruitment and preparation of potential applicants for apprenticeships; where appropriate and feasible, such programs shall provide for pretesting, experience, and training. If no such programs are in existence the sponsor shall seek to initiate these programs.... The sponsor shall also initiate programs to prepare women and encourage women to enter traditionally male programs.
- Admitting to apprenticeship, persons whose age exceeds the maximum age for admission to the program.
- Other appropriate action to ensure that the recruitment, selection, employment, and training of apprentices, [including] the use of present minority and female apprentices and journey persons as recruiters and career counseling.

This regulation also established **goals and timetables** for inclusion of minorities and women. "In order to deal fairly with program sponsors, and with women who are entitled to protection under the goals and timetables requirements, during the first 12 months after the effective date of these regulations [May 12, 1978], the program sponsor would generally be expected to set a goal for women for the entering year class at a rate which is not less than 50 percent of the proportion women are of the workforce in the program sponsor's labor market area and set a percentage goal for women in each class beyond the entering class which is not less than the participation rate of women currently in the preceding class."

The number of women in apprenticeships in the trades has not approached the goal of 50 percent of the female workforce. Nationwide, only 2.5 percent of construction trades participants are women, according to U.S. Department of Labor statistics.

**Bureau of Apprenticeship and Training**

In efforts to cut costs of government, the Bureau of Apprenticeship and Training in the State of Florida has experienced a decrease in staff responsible for oversight of compliance with the regulations governing registered apprenticeship programs. These cost-cutting measures have made comprehensive

oversight of local programs and enforcement of federal laws, including the above equal employment opportunity provisions, difficult to achieve.

## Workplace Issues

The work environment may produce barriers to which women will have to react. Knowledge of these barriers prior to employment and strategies to deal with them will prepare women for the realities of the workplace and will also improve their retention in nontraditional jobs. A few of the issues are isolation on the job, opportunities for training, retaining women, sexual harassment, proper facilities and equipment, child care, racism, and lack of encouragement from families and peers.

**Isolation** caused by being the only woman in the particular trade, on the job site, or in the work crew creates an opportunity for hostility and sexual harassment from co-workers and supervisors. An advocacy organization for women in the trades offers the following strategies to combat women's isolation on the job for employers and unions.

- Whenever possible, place two or more women on a job site.
- Pair the woman with a supportive co-worker, male or female, who knows the ropes.
- Assist women in finding the name of a more experienced woman on the job with whom she can discuss problems or concerns.
- Provide information on support groups of women workers who meet regularly on the job site, in a union, or in the community.
- Assist in developing a support group.
- Support the efforts of women in nontraditional occupations by allowing them to use the company facilities to hold their meetings and company bulletin boards to announce upcoming meetings (Women in Trades, 1998).
- Identify appropriate skill assignments (Workplace Solutions. Orientation, 1998).
- When assigning jobs that require overnight stays, pair women workers together or provide separate lodging from male employees.

While it is usually difficult being the only woman on a job, many women confirm that co-workers and managers are often helpful, and occasionally, protective.

**Providing opportunities for employee training** represents an investment that employers make to increase productivity. However, in a recent study, "women reported that problems with training were extremely common. Survey results showed that not getting proper training, tools or equipment and getting the heaviest or dirtiest assignments are significant factors why women leave the trades. Women expressed frustration at…not being allowed to learn all the aspects of their trades." Effective training programs include teaching all employees:

- The entire range of skills and operations needed
- Basic tool names and usage
- Occupation-specific vocabulary
- Work safety
- The "unwritten rules" of the job site
- Prevention of sexual harassment. (Women in Trades, 1998.)

Workplace Solutions suggests strategies to ensure that women attain the skills to succeed on the job. They are to:

- Offer on-the-job training in occupations considered nontraditional for women.
- Partner with a local community college or educational center to develop customized skills training for employees in nontraditional jobs.
- Offer women scholarships to pursue nontraditional job training or education.
- Provide additional training on site for employees wanting to enhance their skill level.
- Provide education benefits, including support to employees interested in gaining additional technical skills.
- Sponsor a mentoring program.
- Provide occupationally specific math training, tool identification and safety, and physical conditioning (Workplace Solutions, 1998).

**Retaining women in nontraditional jobs** is a goal of employers and unions. However, many of the obstacles and conditions of the workplace frequently force women to leave. Providing support to women is the best retention strategy. This includes:

- A strong policy that prohibits unlawful discrimination and supports women in nontraditional jobs.
- Support group and mentors.
- A formal mechanism by which women can resolve concerns and needs.
- Placing more than one woman on a work site or crew.
- Policies that acknowledge all parents' child care and familial responsibilities and issues affecting women, such as pregnancy and family leave.
- A designated employee to monitor the environment and work to resolve problems related to women entering male-dominated occupations.
- A task force consisting of men and women on the job, front-line supervisors and managers to monitor the environment and provide feedback to those in charge of programs to retain women.
- Exit interviews with women in nontraditional jobs who are leaving (Workplace Solutions, 1998).

**Sexual harassment** of nontraditional female workers occurs too frequently. Women report posters, calendars, and pictures of nude or partially nude women; demeaning remarks about women; unwelcome sexual remarks, jokes, and gestures; and touching, groping, and pinching. Eliminating sexual harassment begins with prevention. The following are key elements to preventing sexual harassment in the workplace (Workplace Solutions, 1998):

- A written policy prohibiting illegal discrimination against any employee is posted. The policy specifically addresses sexual harassment and the steps to take if harassment occurs. The policy is posted in prominent locations throughout the workplace and is reissued to employees annually.
- A grievance procedure has been established for employees to report incidents of sexual harassment which provides several different avenues of reporting complaints—to a direct supervisor, to another level of management, to a union representative, or to a human resource specialist.
- Informal mechanisms have been established to enable employees to discuss concerns about sexual harassment without filing a formal complaint.
- Specialists trained in conducting fair and timely investigations handle complaints of sexual harassment.
- Records of complaints filed are not kept in personnel files and access to

investigation reports is strictly limited.

- Employees found to have sexually harassed others receive swift and consistent discipline.
- Supervisors attend training sessions regularly to review relevant laws and organizational policy, build problem-solving skills, and discuss their responsibility to create a harassment-free workplace.
- Top managers are aware of the importance of their compliance with the policy and actively model appropriate behavior.
- Ongoing sexual harassment awareness training is conducted for every level of employee on paid time. The training requires employees to apply legal definitions to real-life situations through interactive tools.
- Employees are surveyed periodically to assess the work environment for sexual harassment awareness.
- Discussion of strategies to ward off would be harassers.

**Proper facilities and equipment** are sometimes absent or in poor condition for women in the nontraditional workplace. One major inconvenience involves the lack of adequate toilet facilities. The employer should provide accessible, safe, separate, locking, clean toilets and areas in which to change clothing. If toilets are not available at the work site, breaks should be scheduled to allow time to drive to a facility. The lack of tools, equipment, and work clothing to fit women leads to frustration and possible injuries on the job. Modifications to equipment to ensure safe and comfortable operation by women are usually simple. Work clothing is now being sold through catalogs and some retail outlets in women's sizes.

**Child care** presents a challenge for women and men who work in jobs requiring an early reporting time, a distant work site, and non-standard and overtime hours. Employers and unions could alleviate child care issues for both female and male workers if they established a centralized child care center which accommodates all work schedules.

**Racism** is an issue with which women of color in nontraditional occupations have to contend. In a recent survey (Workplace Solutions, 1998), 49% of women in the trades who responded indicated they were the subjects of remarks about race or ethnicity. Civil rights and diversity training for all levels of employees would raise awareness of the problems that women of color face in nontraditional occupations.

**Lack of encouragement**, help, and support from families and peers usually result from several sources, including stereotypes regarding women in nontraditional occupations and the fact that the woman may have a larger salary than her spouse. In addition, women workers may face concern and jealousy from their own spouses and the spouses of male co-workers.

The YWCA of Greater Memphis (1997) states that "strategies to overcome barriers must focus on changing institutions and providing individual support of women." In addition to the strategies already mentioned, it also adds modeling behavior, crisis intervention, management accountability, prevocational training, physical conditioning, training in workplace rights, personal growth training, and professional development training" (p. 5-3).

Turner (1995) adds that women also need "interactional skills including assertiveness training, instruction in conflict management, and leadership skills."

*(For a list of resources of use to potential apprentices, journey level workers, apprenticeship programs, unions, and employers, refer to Appendix H.)*

## WORKSITE 2000

**Worksite 2000**, an initiative of Chicago Women in Trades, envisions a construction industry which has increased numbers of women workers who are treated equitably on the job. They offer the following recommendations for all sectors of the construction industry (Women in Trades, 1998).

**Unions should:**

- Have clear policies on sexual harassment and provide training on sexual harassment to both officers and members.
- Establish women's committees that will advance women's issues, establish and/or promote women's support networks, and promote women's leadership in the union by providing support and training for women running for elected offices and advocating for appointing women to union offices.
- Have an outreach program especially targeted to women.
- Provide training to officers and membership in creating an equitable workplace and establish fair training assignments.
- Use gender-neutral language (i.e., "journey level" rather then "journeyman") and pictures of both men and women in outreach and training materials.
- Use union communication material (newsletters and meetings) to promote fair treatment of women, leadership of women and to support activities of women members.
- Assure that the selection criteria does not have a disparate impact on women including biased tests and upper age limits.

**Apprenticeship programs should:**

- Develop support systems for apprentices through mentoring programs and through training in dealing with sexism, racism, and homophobia.
- Improve recruitment.
- Help women develop support systems.

**Pre-employment programs should:**

- Set specific goals for number of women and recruitment targeted to women.
- Set high training goals and adequate time and resources to meet these goals.
- Establish high placement goals and an aggressive job development component with staff training in advocating for placement of women.
- Include training in physical conditioning and in coping skills.
- Sponsor orientations for women to occupations in the trades that include discussions with tradeswomen.
- Assess individual's needs (child care, confidence building, etc.) and provide services to meet those needs.
- Link with publicly funded construction projects for placement.
- Provide follow-up and support for graduates.

**Tori S. Jack**, a former hairdresser, is in a Preapprenticeship Program and plans to enter the Painting Apprenticeship. This fits her experience because she has also been active in artistic activities. She has found the program very useful in sorting out what she wants to do and in beginning to prepare for the registered apprenticeship program.

## WORKSITE 2000

**Bureau of Apprenticeship and Training and State Apprenticeship Councils should enforce regulations already in existence and budget for adequate resources to monitor compliance with these regulations.**

- Maintain up-to-date records on registered apprenticeships throughout the State, including information on attrition.
- Allocate adequate resources to monitor apprenticeship programs and to investigate and resolve complaints.
- Report to the public at regular intervals on numbers of women apprentices by trade and number of women progressing to journey level.
- Standardize the definition of "good faith efforts."
- Develop a state outreach program for women apprentices.
- Develop guidelines for programs to orient women in the trades.
- Develop methods to ensure that selection criteria do not have a disparate impact on women.
- Provide technical assistance to sponsors of apprenticeship programs to assist in recruitment and retention of women.
- Develop and promote training of supervisors and co-workers to ensure equitable treatment for women.
- Develop written standards of apprenticeship training to ensure equitable training for all apprentices.

For large construction projects, *Worksite 2000* recommends that a team consisting of the project sponsor, contractors, affirmative action specialist, and tradeswomen's support organizations meet weekly. During the meeting, the team will consider the number of women working compared to goals, the number of complaints during the week, the results of interviews with women leaving the work site, and strategies for remedying problem.

## THE SCHOOL'S ROLE: SCHOOL SYSTEM INVOLVEMENT AND STRATEGIES

Starting as early as the elementary level, schools play an important role in familiarizing students with available career opportunities, including apprenticeships. In doing so, schools work toward raising academic standards, reducing dropout rates, improving career opportunities, and developing a more highly skilled workforce (Florida School-to-Work Joint Services Office, 1997). Several strategies to reach these goals are recommended in the Florida Human Resource Act of 1994, as cited in the Florida School-to-Work Implementation Grant, 1995:

- Development and implementation of School-to-Work systems
- Creation of partnerships with business and industry
- Improvement of career counseling and training for counselors
- Staff development through teacher externships
- Articulation with registered pre-apprenticeship, youth apprenticeship and registered apprenticeship programs
- Preparation in basic skills needed in the workforce and early exposure to tools and work issues.

### School-to-Work

In *Gender Gaps: Where Schools Still Fail Our Children*, the American Association of University Women (AAUW) and the American Institutes for Research report on the progress of U. S. schools in making education equitable for all students:

> "Early data suggest that School-to-Work programs, begun in 1994, are not achieving their goal of correcting a sexually lopsided occupational distribution by encouraging girls and boys to pursue nontraditional careers. In School-to-Work initiatives, as in academic standards, rhetorical attention to helping 'all students' succeed sometimes masks the needs of historically disadvantaged groups, including, in this case, girls" (p. 87).

Florida's mission provides that the "Florida School-to-Work system is designed

- To enable every person to achieve economic independence and to attain the quality of life to which he or she aspires.
- To work in full partnership with business and industry to prepare a workforce that will allow Florida's employers to remain competitive in the global economy." (Florida School-to-Work Joint Services Office, 1997, p. 5).

**School-to-Work programs are composed of three major parts:**

1. School-based learning—activities such as career counseling, academic and vocational classroom education, and help in moving from secondary to postsecondary programs.
2. Work-based learning—practical experiences learned through practicums, internships, job shadowing, employment, and apprenticeship programs, and
3. Connecting activities—practices that focus on the creation of links between employers, schools, students, and the community (FL STW Joint Services Office, 1997).

The School-to-Work Act mandates an increase in the representation of young women in nontraditional occupations. The National School-to-Work Office recommends the following strategies:

**Sylvia D. Fallen, Ironworker, ADF. Project Superintendent, currently on Universal Studios Expansion Project began her apprenticeship in 1979—the first woman Ironworker in the state. She "topped out" in 1984 and moved from Hand to Foreman's Assistant, to General Foreman, to Superintendent very quickly. She was Project Superintendent of the building of Animal Kingdom at Disney World.**

At 19 years old, Sylvia was a bartender where ironworkers came in as customers. They encouraged her to take the test. She took it on the weekend and started work on Monday—and never looked back. Her two younger brothers followed in her footsteps and became ironworkers. She worked till she was 5 months pregnant.

Sylvia says she became a foreman and superintendent by asking questions and learning every part of the process. She had a knack for reading blueprints. Sylvia said, "The more that women know about the opportunities in apprenticeships, the more they'd be interested in doing it." She recommends to other women "to take the initiative, learn all aspects of the job, and especially pay close attention to blueprints." Early on she saw the guy standing with the blueprints and giving orders and decided that's what she wanted to do.

- Including women in nontraditional occupations on advisory council;
- Hiring women instructors in nontraditional educational areas;
- Including workshops on nontraditional employment in training institutions;
- Offering grant incentives for encouraging nontraditional careers in requests for proposals for local school-to-work initiatives;
- Purchasing textbooks, videotapes, and posters portraying women in nontraditional occupations;
- Collecting data that link occupations and gender; and
- Designating nontraditional occupations for program development (National School-to-Work Opportunities Office, 1996).

The latest AAUW report, *Gender Gaps: Where Schools Still Fail Our Children*, discusses the 1998 reality of vocational education.

"Assessing the impact of vocational education set asides on women's wages is difficult because many positive outcomes are not apparent until months and years after a program's completion. A 1995 evaluation of vocational equity programs found significant salary increases for displaced homemakers and single parents who took part in Perkins-funded vocational education programs in nine states. [*For a list of Perkins-funded programs in Florida, refer to Appendix D and E.]

A 1994 assessment of Perkins Act set asides found large funding effects at the secondary education level, where on average, funded districts offered twice as many services as unfunded districts. The report [U.S. Department of Education, Office of Research, National Assessment of Vocational Education, Final Report to Congress, V. v IV, 1994] notes that "except where Perkins funds are available, few counselors are actually trained to deal specifically with the vocational needs of nontraditional students and single parents" (p. 88).

**In October, 1998, the United States Congress eliminated Perkins Act set-aside funding for single parents, displaced homemakers, single pregnant women, and gender equity and nontraditional education programs.*

## Selected Portions of
## The School-To-Work Opportunities Act, 1994

**Purpose and Congressional Intent:** (Section 3 of Introduction)(13) to increase opportunities for ***minorities, women, and individuals with disabilities***, by enabling individuals to prepare ***for careers that are not traditional for their race, gender, or disability***.

**School-based Learning Component:** (Title I, Section 102)(1) career awareness and exploration and counseling (beginning at the earliest possible age, but not later than the 7th grade) in order to help students who may be interested to identify and select or reconsider their interests, goals, and career majors, ***including those options that may not be traditional for their gender, race, or ethnicity***.

**Connecting Activities:** (Section 104)(7) collecting and analyzing information regarding post-program outcomes of participants in the School-To-Work Opportunities Program, to the extent practicable, on the basis of ***socioeconomic status, race, gender, ethnicity, culture, and disability***, and on the basis of whether the participants are ***students with limited-English proficiency***, school dropouts, disadvantaged students, or academically talented.

**State Implementation Grants:** (Title II, Subtitle B, Section 213) (b-4-I) Such application shall include a description of the manner in which the individual assigned for the State under section 111(b)(1) of the Carl D. Perkins Vocational and Applied Technology Education Act (20U.S.C.2321(b)(1)—***The Gender Equity Administrator***—collaborated in the development of the application.

**A State Plan Shall:** (d)(7) describe the strategy of the State for providing training for teachers, employers, mentors, counselors, related service personnel, and others, including specialized training and technical support for the ***counseling and training of women, minorities, and individuals with disabilities for high-skill, high-wage careers in nontraditional employment***, and provide assurances of coordination with similar training and technical support under other provisions of the law.

**and:** (d)(14) describe the goals of the State and the methods the State will use, such as awareness and outreach, to ensure ***opportunities for young women*** to participate in School-To-Work Opportunities Programs in a manner that leads to employment in high-performance, high-paying jobs, including ***nontraditional employment***, and goals to ensure an ***environment free from racial and sexual harassment***.

The above paragraph was strengthened by the United States Department of Education to make opportunities for ***young women*** an ***"absolute priority."***

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## Business—Community—School Partnerships

Why are business and community members interested in becoming partners with schools?

- Employers benefit from the development of a skilled work force.
- Communities become involved because the growth and economic development of the entire community depends upon the availability of a skilled workforce (National Center for Research in Vocational Education, 1998).
- Schools—elementary, secondary and post secondary—become involved to offer every student an improved educational and career opportunity (Smith & Beaty, 1994).

There are numerous ways in which schools can involve employers and community members in the education and training of the future workforce. Programs such as School-to-Work, pre-apprenticeship, youth apprenticeship, and registered apprenticeship are work-based forms of learning dependent on partnerships to foster the acquisition of necessary knowledge and skills (Gittleman, 1994). Schools can encourage local businesses to provide training to students who are taking vocational classes. Research has shown that on-the-job training generates productivity growth and increases wage growth, although it slightly decreases the starting wage. The conclusion reached by the Upjohn Institution for Employment Research in a 1997 study recommended that the government should encourage private industry to target under-served groups, such as women and minorities, and allow industry to determine the most efficient method of training.

For students to move from secondary programs into post-secondary programs, it is necessary to form a seamless articulation between these two levels. This can be achieved through School-to-Work, youth apprenticeship, and pre-apprenticeship programs.

An important aspect of a school partnership with industry is on-the-job training. Bloom et al (1997) reported that adult men participating in on-the-job training through JTPA Title II-A Programs increased their average annual salary by $2,109 in thirty months. Adult women in the program increased their average annual salary by $2,292.

## Developmental, Non-Stereotyped Career Counseling

Research presented at the Annual Meeting of the American Educational Research Association (Krei & Rosenbaum, 1997) shows that the majority of counselors surveyed are reluctant to encourage alternatives to college, even for those students who have unrealistic expectations regarding college and career plans. The researchers state that, "counselors were not able to articulate why they steered students to college, what kinds of students they believed should go to college, or for what career goals" (Krei & Rosenbaum, 1997, p. 5). This statement suggests that more appropriate training is needed for career counselors.

Hoyt and Hughey (1997) believe that school counselor education programs must prepare their graduates to provide more effective career counseling. They suggest the following strategies to improve school counselor education programs:

- Programs should increase school counselor knowledge and understanding regarding emerging educational and occupational changes.
- Teach counselors career alternatives to help non four-year college bound students make reasoned postsecondary education choices.

- Provide training for skills in helping parents consider alternatives to the four-year college (Hoyt & Hughey, 1997, p. 95).

Hoyt and Hughey also recommend that school counselor education programs continue to adapt to the changing needs of students caused by developing technologies and changes in the workplace. Therefore, counselors who have already graduated should continue their own education in order to provide current information and career options to students (1997).

Career counselors can also be influential in introducing women to nontraditional careers. The majority of women are unaware of opportunities in the trades, technical occupations, or the apprenticeship system and have little or no paid work experience in these areas. However, it is estimated that one-third of women probably have skills or interests that are transferable to nontraditional work. To introduce these occupations to women, counselors can ask specific questions, describe nontraditional jobs in detail, explain the apprenticeship system, and explain barriers and benefits (Workplace Solutions, 1998).

## Externships for Teachers

Like career counselors, both academic and vocational teachers need to be familiar with the current business and industry practices to provide the most accurate and helpful information to students. Luft (1998) states that schools should provide staff development opportunities that give educators the chance to work directly in business and industry. Luft's research indicates that teachers who participate in the externship program state that they plan to make curricular changes to include increased use of computers and the teaching of other competencies valued in the business world.

In an attempt to acquaint teachers with the technical programs, OTEC Mid-Florida Tech in Orlando offers a summer camp for educators. Benefits for school personnel who attend the camp are 1) inservice points, 2) a daily stipend, 3) increased knowledge of postsecondary offerings, and 4) an understanding of how secondary and postsecondary programs articulate. Overall, past campers reported that they found the experience helpful in providing career information to their students (Mid-Florida Tech, 1997).

## Preparation For Work: Vocational Classes

Research suggests that the majority of employers are not satisfied with the level of skills of high school graduates (Lankard, 1994). Pre-apprenticeship and school-to-work programs can help bridge the gap between what is learned in high school and what is needed in the workplace. Lankard also found that employers tended to be more satisfied with those workers who had received some type of vocational training than they were with those who had a traditional high school education. The employers recommended that students receive basic training in areas such as social skills, math, and science, as well as in the technical skills required in today's work environment.

By beginning these types of programs as early as the elementary level, schools can help bridge the skill gap. In the past, to ensure exploration in nontraditional career options, tools, equipment, and skills, schools—particularly at the middle school level—had requirements for vocational classes. Regardless of sex, students were required to take a sequence of classes, varying from home economics to shop and drafting. Most schools have done away with this type of "vocational wheel" and allow students to choose their electives. Silverman and Pritchard (1996) found that when students were allowed to choose electives, the majority of females did not enroll in technology courses. The researchers suggest that teachers need to provide

**Charlene Hammond**, is a new participant in a Pre-apprenticeship Program. Her previous work experience included being a cashier and working at a grocery store delicatessen.

Charlene said, " I love what I'm doing now; I like working outside. I can be myself on this job." She said she learned many skills from her father.

students with information about careers, wages, and work skills and that students need more female role models and teachers in the areas of technology education and nontraditional careers.

The National School-to-Work Office (1996) reports one reason that females are less likely to enter nontraditional fields is their under-representation in math and science courses. They state, "Many high technology jobs are traditionally dominated by men. These occupations require competency in high-order math and science. Research shows, however, that the participation and achievement of young women in math and science courses tends to decline as their grade level increases. Contextual and experimental learning from early grade school improves math and science attainment for both young women and men, and keeps young women in the science and math pipeline" (p. 2).

Another challenge facing females is the lack of appropriate clothing and equipment that fit properly. Even in middle and high school vocational classes, equipment seems to be designed to accommodate the male population. This problem continues in nontraditional careers and can be both uncomfortable and dangerous. Ill-fitting tools, equipment, and clothing increase the risk of injury in jobs that may intrinsically pose more danger (Women in the Trades, 1998).

## Math, Science and Technology Classes

Math and science courses in the elementary and middle school years are the critical building blocks for upper level math and science classes, school-to-work career clusters in trades, technology and science and postsecondary math and science education" (IWTTFS, no date).

Dr. Sue V. Rosser, author of *Female Friendly Science* (1990), editor of *Teaching the Majority: Breaking the Gender Barrier in Science, Mathematics, and Engineering*, and Director and Professor, Center for Women's Studies and Gender Research, University of Florida, has several suggestions for making math, science and technology classes more female friendly:

- Include females as experimental subjects in experimental designs—shortening the distance between the observer and the subject/object being studied.
- Use more interactive methods.
- Decrease lab exercises in introductory courses in which students must kill animals or render treatments that may be perceived as particularly harsh since biology classes are often gateway courses to other science classes.
- Use precise, gender-neutral language in describing data and theories.
- Be open to critiques of conclusions and theories drawn from observations differing from those drawn by traditionally male science.
- Use a less competitive model to practice science.
- Discuss the role of scientist as only one facet that must be smoothly integrated with other aspects of people's lives.
- Emphasize the humanistic aspects, i.e., solving problems of social concern, of science.
- Expand the kinds of observation; females may see new data.
- Increase the number of observations; remain longer in the observation stage.
- Incorporate and validate females' experiences as part of class discussion or lab work.

- Pair females with females and males with males as lab partners, which breaks the normal mold of assignment.
- Consider problems that have not been considered worthy of scientific inquiry because of the field with which the problem has been traditionally associated.
- Undertake the investigation of problems of more holistic, global scope.
- Combine qualitative and quantitative data gathering.
- Combine methods from a variety of fields or interdisciplinary approaches to problem solving (from a talk to the American Association of University Women and Florida Education and Employment Council for Women and Girls, April 17, 1998, in Bradenton, Florida).

## Blueprint for Career Preparation

In 1989, the State of Florida implemented the Blueprint for Career Preparation, designed to address the "increasing gap between emerging job requirements and the ability of Florida's workforce to meet them." The Florida Department of Education developed the following six steps considered essential to career preparation. This program is no longer in effect, but provides a good model for developmental career counseling.

1. Begin in kindergarten through fifth grade by developing in students an awareness of self, the value of work, and exposure to careers and technology.
2. By grade six, students, with the help of their teachers and parents, should assess personal aptitudes, abilities and interests, and relate them to careers. They should also learn the role of technology in the world of work.
3. In grades seven and eight, students should set career oriented goals and develop a four-year program of study for grades 9 through12 that supports these.
4. During high school, a new "applied curriculum" will make academic concepts relevant to the workplace by integrating vocational courses and academic instruction.
5. Students choosing postsecondary education programs should be able to successfully gain employment through the help of vocational-technical centers, community colleges and universities.
6. Educators should intensify efforts to form partnerships with parents, business, and community members (Florida State Department of Education, 1989).

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The Institute for Women in the Trades, Technology, and Science outlines the components of a program for school-based learning to encourage girls in these nontraditional areas:

- Outreach to female students—"to let students know that women can do trade, technology, and science jobs and that they will be welcome in school and work-based learning settings."
- Career information and advising—"It is important that career information shows women in a wide variety of trades, technology and science occupations."
- Women mentors—"Women in nontraditional career tracks will greatly benefit from at least one woman mentor who can advise them on such issues as establishing credibility on an all male worksite.
- Training for teachers and counselors—inservice and preservice "for overcoming the learning patterns girls and boys often fall into in the classroom that impede participation and education and achievement in math and science classes."
- Parent involvement—"Parents can learn strategies that will support their daughters' achievement in math and science education and their pursuit of career clusters in trades, technology, and science.
- Math and science education—"Math and science courses in the elementary and middle school years are the critical building blocks for upper level classes, school-to-work career clusters in trades, technology, science and in postsecondary math and science education" (ITTS, 1998).

## Hard Hatted Women

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http://www.stratos.net/hhw

Begun in 1979 by three women active in their unions—a truck driver, a steel worker, and telephone installer, Hard Hatted Women (HHW) has grown from a loosely structured support group into a well established not-for-profit membership organization. Their mission is: "To promote women's economic empowerment by ensuring equal access and opportunity to all jobs, especially non-traditional."

Their goals are to:

- Encourage and prepare women for non-traditional employment through education, technical training and assistance with job placement.
- Defend and advocate affirmative action and equity in recruitment, training and hiring.
- Combat harassment and discrimination against women workers on the basis of gender, race, sexual preference, or age.
- Break barriers of isolation women face in male dominated jobs and training programs.
- Advocate for issues affecting women in non-traditional employment, including outreach, recruitment and retention.

Hard Hatted Women provides the following services:

- Pre-apprenticeship training program—to prepare women for union apprenticeships and entry level non-traditional employment.
- Annual career fair for women.
- Women in Highways Project—to increase the number of women working in road and bridge construction jobs.
- Job bank—a computerized database matching women looking for nontraditional jobs to employers seeking to hire women.
- *Riveting News*—a bi-monthly newsletter.
- Education services.

**Jeanne Owens** is a first year electrical apprentice—non traditional in gender and age—who has worked as a manager of a convenience store, in auto parts manufacturing, as a truck driver, and two years on road work. She says she enjoys the work, finds the guys easy to work with, and would recommend it to other women.

Hard Hatted Women provides educational resources to the Cleveland area schools. HHW recruits role model speakers, presents school workshops entitled "More Than Show & Tell: A Nontraditional Career Education Project of Hard Hatted Women," incorporating nontraditional career and student-centered activities, and makes available user-friendly and appealing resources to teachers that are applicable to math and science, social studies, reading, writing, and physical education classes.

Resources include posters, calendars, clip art, coloring books, videos, role model teddy bears, books.



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**Gateway Stadium and Arena:**

Hard Hatted Women worked with the Gateway Economic Development Corporation and the Black Trades Council to promote hiring women and minorities on this project. Women worked 5.9% of the hours on the project, short of the goal of 6.9%, but up from 0% for the first six months of the project (LeBreton, et al, 1995, p. 27-29).

## Step-Up (BAT, 1998):

"A program created by the U.S. Department of Housing and Urban Development with the technical assistance of the Bureau of Apprenticeship and Training and the Department of Justice. It provides employment, job training, and career opportunities to public and Indian housing residents and other low-income persons. STEP-UP operates as a first step (one-year maximum) in a longer employment and training curriculum. It was developed as a component of the National Apprenticeship and Training Standards, which is sponsored by the National Association of Housing and Redevelopment Officials (NAHRO). There are 17 occupations in the NAHRO apprenticeship standards."

Locations include: Huntsville, AL; Changler, Nogales and Phoenix AZ; **Fort Lauderdale, FL**; Chicago and Joliet, IL; Baltimore, MD; Detroit, MI; St. Paul and Minneapolis, MN; Albany, Cohoes, Schenectady, Troy, and Watervliet, NY; Dallas, TX; Milwaukee, WI; and Huntington, WV.

## Step-Up, Fort Lauderdale, Florida:

The Housing Authority of the City of Fort Lauderdale "sees STEP-UP as more than a job training effort; it is intended to increase opportunities for residents through both education and training and to help them climb out of poverty." The program focuses on "team building, self motivation, problem solving, and critical thinking skills"—as well as improving housing conditions. HAFCL uses a nonprofit development corporation to rehabilitate houses and apartments through a program that meets formal apprenticeship standards that are approved by the State Apprenticeship Council. The program employs low-income persons residing in public housing, specifically, high-risk 18-24-year-olds. (National Association of Housing and Redevelopment Officials, 1997, p. 76-76).

## Women in Apprenticeship and Nontraditional Occupations (WANTO) Act of 1992:

Women's Bureau Director, Ida L. Castro, praised this law and the resulting program as one that "enables women to earn higher wages and better benefits" than jobs in more traditional fields. "These women will have access to training, opportunity and advancement. For many it is also a path to economic security and self sufficiency" (Women's Bureau Press Release, October 1, 1997). The WANTO Act of 1992 made grants to several organizations to increase the participation of women in apprenticeships and nontraditional occupations. These grantees include:

**Mi Casa Resource Center for Women** in Denver to "provide on- and off-site technical assistance to employers, labor unions and apprenticeship programs to strengthen system linkages, particularly linking its highway construction and maintenance pre-apprenticeship program with sponsored apprenticeship training, involving more than 60 employers and apprenticeship programs while moving many more than 100 women into apprenticeship and nontraditional employment."

**Nontraditional Employment for Women (NEW)** in New York, NY, to provide on- and off-site technical assistance employers and labor unions, particularly those in the telecommunications, utilities and high-technology in the health industries, including the placement and retention of low-income women in blue-collar and high-tech employment and apprenticeship, involving more than 35 employers and unions and 150 women.

**Chicago Women in Trades (CWIT)**, a partnership between CWIT composed exclusively of tradeswomen and Women's Bureau of the U.S. Department of Labor and the Illinois State Board of Education, Adult, Vocational and Technical Education Division.

- **Technical Opportunities Program**, a pre-apprenticeship training program, began to take shape in 1980 to provide support and advocacy for women in the trades. "In the early years, tutoring took place on an informal, one-on-one basis with women enrolled and experiencing difficulty in area trade schools" (Kreutz, 1992, p. 4). In 1987 CWIT initiated a formal pre-apprenticeship program consisting of 110 to 120 classroom hours, half of which focuses on academic skills, women's resources, and physical conditioning, the other half consists of hands-on training. The curriculum includes mathematics, geometry, algebra, blueprint reading, employability skills, an overview of the trades, the safe use of tools, and safe work habits. Upon completion women are prepared to pass entrance exams for union apprenticeships. CWIT makes orientation presentations to large numbers of women—up to 300 prospective tradeswomen at a time. Classes have ranged from 14 to 50, with a current goal of placing no more than 25 women in any one class" (p. 6). Not all women in the pre-apprenticeship classes go on to become an apprentice or a journeyman but each leaves the class with a (self-described) "increased sense of confidence and motivation" as well as new skills with tools and for employability.

In addition to the pre-apprenticeship program, CWIT sponsors the following programs:

- **Career Fairs** to inform and educate women about work in the trades.
- **Worksite 2000**—technical assistance to promote integration of tradeswomen for employers and unions.
- **Girls at Work**—for elementary school girls to create awareness of high-wage, high-skilled careers.
- **Publications:** *Tools for Success, Building Equal Opportunity and Breaking New Ground: Worksite 2000.*
- **Projects:** Cook County Jail, Juvenile Detention Center, U.S. Post Office, McCormick Place Expansion. Chicago Women in Trades joined with the Chicago Urban League to advocate for employment of city residents and minorities on city construction projects in the late 1970's. A goal of 5 percent women workers on the above projects was set; this goal was met or exceeded on each project. For McCormick Place a goal of 7 percent skilled and 10 percent unskilled women was set, with a result of 5.5 percent and 6.9 percent respectively (LeBreton, et al, 1995, p.18-23).

220 South Ashland Avenue, Suite 101
Chicago, IL 60607-1805

**Preparation Recruitment Employment Program, Inc. (PREP).** Targets labor organizations/unions and related employers to jointly promote its Diversity in Apprenticeship in Ohio. PREP implemented the project in five phases:

**Teresa Alcantar**, a third year apprentice, had done residential wiring with her husband before being divorced.

Teresa has worked in customer service, 70-80 hours a week at $4.50 and hour to support herself and her daughter. Now she has her own house and her little girl "couldn't be happier." Teresa has more time to spend with her daughter. She said this about her experience in the electrical apprenticeship: "It's the greatest accomplishment: You're proud of yourself because you've become something. And the greatest thing—my little girl's pride."

When asked if she would recommend the program to other women, Teresa said, "Not everybody can cut it, the physical labor."

She added that she is not fully accepted by society, but she is completely accepted by other workers.

1. Outreach and recruitment to participant employer associations, unions and JATCs
2. Needs evaluation and assessment
3. Customized development plan based on needs
4. Establishment of Cincinnati and Cleveland demonstration sites
5. Production of technical assistance guidelines manual.

2261 Francis Lane
Cincinnati, OH 45206
Ph. 513/221-4700
Fax 513/221-3403

## Home Depot's Kids Workshops

Home Depot provides monthly workshops to help children "1) develop Do-It-Yourself skills, 2) learn safety skills, and 3) gain a sense of accomplishment.... Kids build a different project each month and each participant [receives] an apron, a diploma and an achievement pin, as well as a finished project to take home." On a recent Saturday in Jacksonville, Florida, female participants far outnumbered the males and were busy using hammers, paintbrushes, rulers, and other tools.

## The Academy of Construction Trades, Inc.

"Since 1992, Central Florida's Academy of Construction Trades (ACT) has partnered high school aged men and women with local construction contractors to help build Central Florida's future, literally. And with the impending construction rush in Central Florida, it is no wonder that students, construction contractors, and Seminole County School Board representatives are heaping praise on ACT."

"ACT is a high school and post-secondary construction trades program. As an apprenticeship program, it works closely with the Orange and Seminole County school boards to promote the School-to-Work Initiative passed by the U.S. Department of Education."

"The national average labor rates for the construction industry are promising. A carpenter, electrician, plumber and sprinkler fitter, all trades that ACT promotes, each garnered over $50,000 of average yearly income in 1996" (Hall, 1997).

Academy of Construction Trades
407/682-3368

World Wide Web address:
http://www.iag.net/~jamieb/index.htm

## YWCA – Greater Milwaukee Nontraditional Employment (NET) Program

"Net has developed and implemented local initiatives and programs that assist women and other under-represented individuals to become qualified employment candidates for the constructions, manufacturing and service industries" (YWCA—Greater Milwaukee, 1996).

**Milwaukee Women in the Trades** works with the YWCA NET Program to encourage and assist women in entrance into apprenticeable trades.

YWCA—Greater Milwaukee
1915 North Dr. Martin Luther King, Jr. Drive
PO Box 12544
Milwaukee, WI 53212-0544
Ph. 414/374-1800 • Fax 414/374-2680

World Wide Web address:
http://www.ywcaogm.org/netmodel.html

## CRAFT (Community, Restitution, Apprenticeship Focused Training) Skills,

"Developed and initiated by the Home Builders Institute, the educational arm of the National Association of Home Builders, CRAFT is a national training program for high-risk and adjudicated youth. Youth receive pre-apprenticeship training in residential construction trades, job placement, and follow-up services. CRAFT operates as an alternative to incarceration, intervention or after-care programs.

Key elements of the CRAFT model include:

1. Partnership building and linkages
2. Comprehensive service delivery
3. Community training projects
4. Industry-driven responsive training
5. Motivation, esteem building and leadership
6. Job placement, often with home builder association members
7. Follow-up services.

Programs are operating in **Daytona Beach, Ft. Lauderdale, Orlando, and West Palm Beach, Florida**, as well as Sabillasville, Maryland, and Bismarck, North Dakota.

Senior Director for Apprenticeship
Home Builders Institute
1090 Vermont Ave. NW, Suite 600
Washington, DC 20005
Ph. 202/371-0600

World Wide Web address:
http://www.hbi.org/hbiprog.html

## Central Florida Joint Training Association, Inc.

This pre-apprenticeship program provides career exploration and counseling, job seeking and retention skills and training in skills needed for entry into registered apprenticeships to women and men who lack the required skills to enter immediately a registered apprenticeship program. Recently women and men incarcerated in the Orange County Correctional Institution were provided the opportunity to enter the pre-apprenticeship program and attend classes at the Correctional Institution's facilities.

More than 500 pre-apprentices have entered the program and more than 470 have graduated with the skills necessary to enter a registered apprenticeship.

Central Florida Joint Training Association, Inc.
2738 N. Forsyth Road
Winter Park, FL 32792
Ph. 407/352-1851 • Fax 407/351-3796

**Orange County Public Schools** offer Registered Apprenticeship programs in carpentry, electricity, masonry, heavy equipment operation, plumbing, air conditioning, refrigeration and heating service, painting and decorating, and structural steel work. The Equity Program encourages women to enter these nontraditional occupational training programs under Perkins 221 and 222 grants.

Orange County Schools:
Ruth Lane
2900 W. Oak Ridge Rd.
Orlando, FL 32809
Ph. 407/855-5880 X2294
Fax 407/251-6197

World Wide Web address:
http://mft.ocps.k12.fl.us/working.htm

**PTEC Pinellas County Public Schools** offer Registered Apprenticeship training at the Construction and Transportation Academies, PTEC Clearwater Campus in HVAC, building maintenance, electricity, diesel mechanics, precision machining, and marine mechanics as well as more traditional fields.

Dr. Thomas Noble, Dept. Chair
Apprenticeship Programs
PTEC
6100 154th Avenue North
Clearwater, Fl 34620
813/538-7167 X1057

World Wide Web address:
http://ptecclw.pinellas.k12fl.us/appren.htm

## Mech Tech

Mech Tech was founded in 1988 in Rhode Island on a simple concept: "replace long-gone apprenticeship programs with a 4-year 8000-hour program that combines paid in-the-shop experience at local companies with an associate degree from a community college. Those completing the program earn a college degree, journeyman's papers and a good shot at a job." Mech-Tech now operates programs in Massachusetts, New Hampshire, Maryland, and soon in North Carolina (Abood, D., (1996).

## Apprenticeships for the 21st Century

Arvig Communications Systems initiated a program with public high schools and a community college in Minnesota to offer students at least 16 years old a registered apprenticeship program in telephone maintenance, CATV maintenance, engineer technician, network technician and other telecommunication specialties. This is an earn-while-you-learn program and results in a certificate from the Minnesota Department of Labor.

World Wide Web address:
http://www.eot.com/Apprentice/html

## Siemens Corporation

Siemens Corporation has set up four pilot programs including Youth, Adult, and Upgrade Apprenticeships in the United States. One such program is in **Lake Mary, Florida**, at Siemens Telecom Networks. Other programs

exist in Santa Clara, CA., Franklyn, KY, Raleigh, NC, and Alpharetta, GA. These programs combine an academic curriculum with hands-on practical training to produce highly skilled workers. While the program in St. Mary's has attracted very small numbers of females to this point, the program promises to be a great opportunity for women and girls to obtain training in an area of clean, well-paid, skilled work.

World Wide Web address:
http://usa.siemens.com/challenge/app_training.htm

## Florida Youth Apprenticeship Programs

A planned program of instruction, youth apprenticeship is designed for high-school students 16 years of age or older. Through a combination of academic study, related technical instruction, and paid on-the-job training in their chosen career paths, youth apprentices earn a high school diploma, gain valuable job skills, and receive advanced standing in an adult apprenticeship program upon graduation.

***Contact Persons:***
**State**
STW Joint Services
Florida Department of Education
325 W. Gaines Street
Tallahassee, FL 32399-0400
904/488-1147

**Brevard County**
Air Conditioning Program: two years at high-school level during eleventh and twelfth grades, one-half-day apprenticeship and one-half-day high school classes, and two years of post high school apprenticeship.

***Contact:***
Ron Rearden
Brevard County School Board
2700 St. Johns Street
Melbourne, FL
407/631-1911

**Escambia County**
Construction Trades and Banking and Finance Programs: two years in high school and two years post high school entailing an earn-while-you-learn program.

***Contact:***
Carl Leiterman
Coordinator of School-to-Work
Escambia County School District
30 E. Texar Dr.
Pensacola, FL 32503
850/469-5309

**Pinellas County:**
Construction Academy/Transportation Academy: four years in high school program.

***Contact:***
Scott Davis
Pinellas County School Administration
301 4th St. SW
Largo, FL 34649
813/588-6323
e-mail: scottd.9000@aol.com

**Seminole County:**
Academy of Construction Trades: two years at high school level and post high school.

***Contact:***
Jamie Buck
Academy of Construction Trades
PO Box 160819
Altamonte Springs, FL 32716-0819
407/682-3368

## Middle School Mentoring Programs

Finally, the Council wants to make special recognition of the Perkins-funded Middle School Mentoring Programs in the State of Florida. (For complete information on contact names, addresses, and telephone numbers, refer to Appendix D.) These programs are providing nontraditional occupational exploration, experiences and counseling, as well as mentoring with successful women in nontraditional fields of study and work.

**Aspira of Florida, Inc., Dade County**
**Broward County Schools**
**Gulf County Schools**
**Heart of Florida Girl Scouts, Polk County**
**Indian River County Schools**
**Martin County Schools**
**Santa Rosa County Schools**
**Seminole County Schools**
**St. Lucie County Schools**

*This list of programs is a sample, not an exhaustive list. Many more are listed on the Internet. Using key words such as apprentice, nontraditional occupations, trades, hard hat, women, vocational education, Florida will produce many more.*

## REFERENCES


Abood, D. (1996) Mech Tech helps replace lost apprenticeships. *Providence Business News, June 3, 1996.* Retrieved June 4, 1998 from the World Wide Web: http://www.pbn.com/W060396/Mech.htm

American Airpower Heritage Museum. *Rosie the Riveter: Women join the industrial workforce.* Retrieved August 17, 1998 from the World Wide Web: http://www.avdigest.com/aahm/trosier.html

American Association of University Women. (1998). *Gender gaps: Where schools still fail our children.* Washington, D.C.: American Association of University Women Educational Foundation.

BAT – Bureau of Apprenticeship and Training. (1998). *Apprenticeship programs.* Retrieved August 18, 1998 from the World Wide Web: http://doleta.wdsc.org/bat/stepup.htm

Blackwelder, J.K. (1997). *Now hiring: The feminization of work in the United States, 1900-1995.* College Station, TX: Texas A & M University Press.

Bloom, H.S., Orr, L.L., Bell, S.H., Cave, G., Doolittle, F., Lin, W., & Bos, J. M. (1997). The benefits and costs of JTPA Title II-A Programs: Key findings from the National Job Training Partnership Act. *Journal of Human Resources,* 32, 549-576.

Central Florida Electrical Joint Apprenticeship and Training Committee (1997). *Electrician's apprenticeship program* [Brochure].

Deege, S. A. (1998) *Factors influencing females choosing nontraditional vocational-technical occupations.* Unpublished dissertation, Lindenwood University.

Eisenberg, S. (1998). *We'll call you if we need you: Experiences of women working construction.* Ithica, NY: Cornell University Press.

Evanciew, C. (1994). Maximizing learning through youth apprenticeship programs. *The ClearingHouse,* 68, 111-115.

Federal Committee on Apprenticeship. (1992). *The meaning of apprenticeship: When and how to use the term.* [Policy Recommendation].

Florida Administrative Code: Registered Apprenticeship (1997). Chapter 38H-16 apprenticeship programs and chapter 38H-20 state apprenticeship council.

The Florida Council on Vocational Education. (1992). *The benefits of apprenticeship: Implications for public policy in Florida.* Tallahassee, FL: Author.

Florida Department of Labor and Employment Services (1998). *Florida apprenticeship program reaches all time high.* Press release. Retrieved July 23, 1998 from the World Wide Web: http://sun6.dms.state.fl.us/dles/pr/70698.html

Florida Human Resource Act of 1994, Florida School-to-Work Implementation Grant (1995).

Florida School-to-Work Joint Services Office (1997). *The Florida school-to-work handbook.* Tallahassee, FL: Author.

Florida School-to-Work Joint Services Office. (1997). *Florida's work-based learning and child labor law—resource guide.* Tallahassee, FL: Author.

Florida State Department of Education (1989). *Blueprint for career preparation.* Tallahassee, FL: Author.

Florida Statute Chapter 446 Job Training Regarding Apprenticeship, 1997.

Gitter, R., Scheuer, M. (1997). U.S. and German youths: Unemployment and the transition from school to work. *Monthly Labor Review,* 120, 16-21.

Gittleman, M. (1994). Partners in transition. *Training and Development*, 48,32-38.

Gray, K. & Huang, N-T. (1993) The gender gap in yearly earnings: Is it lack of education or occupational segregation? *Journal of Vocational Educational Research*, 18, 3.p 1-14.

Hall, G.R. (1997) The Academy of Construction Trades, Inc.: Building Central Florida's future. *Central Florida Constructor: A publication of the Associated General Contractor of Central Florida.*

Hamilton, S. & Hamilton, M.A. (1994). Schools and workplaces: Partners in transition. *Theory into Practice*, 33, 242-248.

Hartman, R. (Executive Producer). (1998, September 27). *60 Minutes.* New York, Columbia Broadcasting System.

Herman, A.M., Secretary, (February, 1998) *About welfare—Myths, facts, challenges and solutions.* A Report of the U.S. Department of Labor. Retrieved September 23, 1998 from the World Wide Web: http://www.usdol.gov

Hoyt, K.B. & Hughey, K. F. (1997). Career counseling in the knowledge age: Implications for change in school counselor education programs. *Journal of Career Development*, 24, 95-102.

Ingham Intermediate School District. (1995). *A guide to work-based learning programs: Part 1—occupational learning.* Lansing, MI: Michigan Center for Career and Technical Education. (ERIC Document Reproduction Service No. ED 384 724).

IWTTP – Illinois Women in Trades Training Partnership. (1998). *Laying the foundation: A quick self-assessment for women considering nontraditional careers.* Retrieved August 18, 1998 from the World Wide Web: http://www.accessil.com/iwttp/nontrad.html

IWTTS – Institute for Women in Trades, Technology and Science. *School-to-work & nontraditional employment fact sheet.* Retrieved September 22, 1998 from the World Wide Web: http://www.serve.com/iwitts/html/nontradi.htm

Jamerson, Hon. Doug, Secretary of Labor of Florida, "Florida apprenticeship program reaches all time high." [press release, July 6, 1998]. Retrieved July 23, 1998 from the World Wide Web: http://sun6.dms.state.fl.us/dles/pr/o7o698.htm

Krei, M.S., & Rosenbaum, J.E. (1997, March). *Career and college advice to the forgotten half: What do counselors and vocational teachers advise?* Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL.

Kreutz, E. (1992). *In for a change: A curriculum guide for pre-apprenticeship training.* Springfield, IL: Illinois State Board of Education.

Lankard, B.A. (1994). *Employers' expectations of vocational education* (Report No. EDO-CE-94-149). Washington, D.C.: Office of Educational Research and Improvement. (ERIC Document Reproduction Service No. ED 376 273).

LeBreton, L.W., Loevy, S.S. & Sugarman, L. (1995). *Building equal opportunity: Six affirmative action programs for women construction workers.* Chicago: Chicago Women in Trades.

Levitan, S.A., Mangum, G.L. & Mangum, S.L. (1998). *Programs in aid of the poor* (7th ed.). Baltimore, MD: Johns Hopkins University Press.

Luft, V.D. (1994). Assessment of an educator externship program. In G.S. Straquadine (Ed.), *Western Region Agricultural Education Research Meeting: Vol. 17. Implementing the reinvention of agricultural education: Change is inevitable, growth is optional* (pp. 140-151).

Mid-Florida Technical Institute (1997). *Summer camp for educators* [Brochure].

National Center for Children in Poverty. (1993). "Young children still live in poverty—despite parental employment." Retrieved October 3, 1998 from the World Wide Web: http://cpmcnet.columbia.edu/news/childpov/newi0048.htm.

National Center for Research in Vocational Education (1998, August). The role of community partnerships in school-to-work-programs. *Centerfocus, 20*, 1-5.

National Governors Association. (1998). *Strategies to promote education, skill development, and career advancement opportunities for low-skilled workers.* Retrieved August 25, 1998 from the World Wide Web: http://nga.org/Pubs/IssuesBrief/1998/980728Career.asj

National School-to-Work Opportunities Office (1996). *Non-traditional school-to-work opportunities for young women.* Washington, D.C.: Author.

National School-to-Work Opportunity Office. (1997). *School-to-work glossary of terms.* Washington, D.C.: National School-to-Work Learning and Information Center (ERIC Document Reproduction Service No. ED 411 444).

NCREL, North Central Regional Educational Laboratory. (1996). *Youth apprenticeship.* Retrieved September 22, 1998 from the World Wide Web: http://www.ncrel.org/sdrs/areas/issues/envrnmnt/stw/sw3youth.htm

Padavic, I. (1996). Women in blue-collar occupations. In P.J. Dubeck & K. Borman (Eds.), *Women and work: A handbook.* (pp. 147-152). New York: Garland.

Plumbers and Pipefitters Local #234 (1995). *Plumbing, backflow technology, medical gas training* [Brochure].

Schroedel, J.R. (1990) Blue-collar women: Paying the price at home and on the job. In H.Y. Grossman & N.L. Chester (Eds.), *The experience & meaning of work in women's lives.* (pp. 241-260). Hillsdale, NJ: Erlbaum.

Shapiro, D., Iannozzi, M. (1998). The benefits to bridging work and school. *The Annals of the American Academy, 559*, 157-166.

Silverman, S., & Pritchard, A.M. (1996). Building their future: Girls and technology education in Connecticut. *Journal of Technology Education, 7*, 1045-1064.

Smith, S.G., & Beatty, D. (1994, January). *Effective partnership between public education and private industry.* Paper presented at the Annual Conference on Workforce Training of the League for Innovation in the Community College, New Orleans, LA.

*Source: Building news and views. (Summer, 1998).* Retrieved September 10 from the World Wide Web: http://www.thesourcemag.com/summer98/cover-story_sum98.html

Strawn, J. (1998). *Beyond job search or basic education: Rethinking the role of skills in welfare reform. (Executive Summary).* Center for Law and Social Policy. Retrieved October 15, 1998 from the World Wide Web: http://www.clasp.org/pubs/jobseducation/beyondexec.htm.

Turner, H.A. (1995). *Strategies for increasing women's participation in technical and skilled trades training.* Digitally published by Pine Tree Publishing: Victoria, Canada. http://www.islandnet.com/~haturner/edtech1.htm August 18, 1998.

UAW – United Auto Workers. (1998). *Women and World War II.* Retrieved, September 15, 1998 from the World Wide Web: http://uaw.org/special/women3.htm

Upjohn Institution for Employment Research (1997). *On the job training*. Kalamazoo, MI: Author

United States Department of Labor, Women's Bureau. (1993). *Facts on Working Women*. Retrieved August 25, 1998 from World Wide Web: http://www.dol.gov/dol/wb/-pubs/wwmf1.htm

United State Department of Labor. (1997) *Nontraditional occupations for employed women in 1997*. Retrieved September 7, 1998 from the World Wide Web: http://gatekeeper.dol.gov/dol/wb_pubs/nontra97.htm

Walshok, M.L. (1981). *Blue-collar women: Pioneers on the male frontier*. Garden City, NY: Anchor Press/Doubleday.

Western Michigan University. (1986). *Hard hats, boots and goggles: Jobs that pay*. Kalamazoo: Western Michigan University.

Women in Apprenticeships and Nontraditional Occupations. (WANTO) Retrieved March 18, 1998, from the World Wide Web: http://www.womenintrades.org/html

Women in Trades. Retrieved August 23, 1998 from the World Wide Web: http://www.womenintrades.org

Women in Trades. *Worksite 2000*. Retrieved August 23, 1998 from the World Wide Web: http://www.womenintrades.org

Women's Bureau, U.S. Department of Labor (1997). [Press Release, October 1, 1997]. Retrieved from the World Wide Web: http://www.dol/opa/public/media/press/wb/wb97345.html

Women's Bureau, U.S. Department of Labor (1995). *Care around the clock: Developing child care resources before 9 and after 5*. Retrieved October 3, 1998 from the World Wide Web: http://ttrcnew.ttrc.doleta.gov/cgi-bin/br...n/footers/footer2.htm&maxhits=10&offset=

Workplace Solutions. Retrieved October 4, 1998 from the World Wide Web: http://www.workplacesolutions.org

YWCA of Greater Memphis. (1997). *Training for the 21st century: A nontraditional approach*. Memphis: YWCA of Greater Memphis.

## APPENDIX A: GLOSSARY OF TERMS

A common set of definitions is important to the discussion and understanding of apprenticeships. To that end, the Council presents a brief glossary of terms used in this report.

**Bureau of Apprenticeship and Training (BAT):** U.S. Department of Labor, Employment and Training is the Federal entity responsible for the administration of the National Apprenticeship System, established in 1937. BAT is the registration authority, administers apprenticeship standards, oversees apprentices' benefits and safeguards the apprentices' welfare. (BAT, 1998).

**Federal Committee on Apprenticeship (FCA):** Advisory group composed of employer, labor, and public representatives that reports to the Secretary of Labor on apprenticeship and training issues.

**Registered Apprenticeship:** "A relationship between an employer and employee during which the worker, or apprentice, learns an occupation in a structured program sponsored jointly by employers and labor unions or operated by employers and employee associations" (National School to Work Opportunity Office, 1997).

**Registered Apprenticeship Program: The Essential Components**

"Apprenticeship is a training strategy that:

1. Combines supervised, structured on-the-job training with related theoretical instruction and is sponsored by employers or labor/management groups that have the ability to hire and train in a work environment.
2. Prepares people for skilled employment by conducting training in bona fide and documented employment settings.
3. Meets requirements that are clearly delineated in the Federal and State laws and regulations. The National Apprenticeship Act of 1937 (also known as the Fitzgerald Act) and numerous State laws.
4. By virtue of a legal contract (indenture) leads to a Certificate of Completion and official journeyperson status.
5. Involves a tangible and generally sizable investment on the part of the employer or labor/management program sponsor.
6. Pays wages to its participants at least during the on-the-job training phase of their apprenticeship and that increases these wages throughout the training program in accordance with a predefined wage progression scale.
7. In which participants learn by working directly under the supervision and tutelage of masters in the craft, trade, or relevant occupational area.
8. Involves a written agreement and an implicit social obligation between the program sponsor and the apprentice. The written agreement, which is signed by both the apprentice and the program sponsor is ratified by government, details the roles and responsibilities of each party" (The Federal Committee on Apprenticeship, 1992).

The Federal Committee on Apprenticeship notes that, "The rush to embrace apprenticeship is leading to efforts that could undermine the very pillars of its value…In some instances apprenticeship is being viewed as a generic concept—one that can be loosely applied to a variety of learning situations….We conclude that the term 'apprenticeship' should be reserved only for those programs that adhere to the eight essential components described [above]."

Florida Statutes define Registered Apprenticeship as "An organized course of instruction, registered and approved by the Division [of Jobs and Benefits], which course shall contain all terms and conditions for the qualifications, recruitment, selection, employment, and training of apprentices including such matters as the requirements for a written apprenticeship agreement" (Section 446.021 [6], Florida Statutes, [F.S.], 1995).

**Types of Federally Registered Apprenticeship Programs** include the following:

**Group-Joint (GJ)** Employer group with labor organization involved

**Individual Joint (IJ)** Individual employer with labor organization involved

**Group-Nonjoint (GNJ)** Employer group with no labor organization involved

**Individual Nonjoint (INJ)** Individual employer with no labor organization involved

**Group-Waiver (GW)** Employer group where either the employer group or the labor organization has voluntarily waived participation

**Individual Waiver (IW)** Individual employer where either the employer or the labor organization has voluntarily waived participation" (Bureau of Apprenticeship Training, 1998).

**Joint Apprenticeship and Training Committee (JATC):** an administrative body responsible for the oversight of apprenticeship programs sponsored jointly by employers and unions (BAT, 1998).

**Journeyman:**** "a person working in an apprenticeable occupation who has successfully completed a registered apprenticeship program or who has worked the number of years required by established industry practices for the particular trade or occupation" (Section 446.021 [4], Florida Statutes [F.S.], 1995).

****Journeyman** is the preferred term among women the Council spoke to who have achieved this level in their chosen occupation. Most rejected attempts to feminize or neuter this term. The feeling most often expressed was that this was a traditional title of respect and achievement in their trade and the use of any other term diminished their own accomplishments. However in some sources the words "Journeywoman" and "Journeyperson" were also used.

**Apprentice:** a person at least 16 years of age who is engaged in learning a recognized skilled trade through actual work experience under the supervision of journeymen craftsmen in which training is combined with properly coordinated studies of related technical and supplementary subjects, and who has entered into a written apprentice agreement with a registered apprenticeship sponsor who may be either an employer, an association of employers, or a local joint apprenticeship committee (Chapter 38H-16.002 [18], Florida Administrative Code, 1997).

**Pre-apprentice:** "any person 16 years of age or over engaged in any course of instruction in the public school system or elsewhere, which course is registered as a pre-apprenticeship program with the Division of Jobs and Benefits of the Department of Labor and Employment Security" (Section 446.021 [5], Florida Statutes [F.S.], 1995.

This term is most often used for programs aimed at people who have left school, have deficits preventing them from entering directly into an

apprenticeship program, and who are employed often at entry level in the trade in which they hope to apprentice.

**Nontraditional Occupation** is a term used for any occupation practiced by 75 percent or more of one gender engaged in by a person of the opposite gender. Nursing is an example of a nontraditional occupation for males; welding is a nontraditional occupation for females.

## School-Based Programs Include the Following:

**Youth Apprenticeship Program:** "a career-based program of academic and technical instruction in the public school system composed of an in-school component and a coordinated paid work-experience component. The youth apprenticeship follows a career major strategy based on identified career ladders and has formal connections to, and advanced placement in, registered apprenticeships and/or related postsecondary occupational/ technical programs" (Florida School-to-Work Joint Services Office, Florida's Work-Based Learning and Child Labor Law-Resource Guide, 1997).

The term *youth apprenticeship* is used very broadly with no nationally accepted definition. "Some youth apprenticeships are modeled after the German dual system; others are statewide, top-down legislated initiatives; some originate in areas with strong business and education partnerships, and others are industry driven" (North Central Regional Educational Laboratory (NCREL), 1996).

**On-the-Job Training (OJT):** "a formalized system of job processes which may be augmented by related instruction that provides the experience and knowledge necessary to meet the training objective of learning a specific skill, trade, or occupation. Such training programs shall be at least 6 months and not more than 2 years in duration" and should be registered with the Division of Jobs and Benefits of the Department of Labor and Employment Security. (Section 446.021 [7], Florida Statutes [F.S.], 1995).

**School-to-Work Initiative (STW):** an educational program funded by the School-to-Work Opportunities act of 1994. The STW initiative is a "challenge to all sectors of the community to work together to create a new system of workforce education designed to meet shared and individual career needs. This approach addresses the needs of Florida employers for better prepared workers as well as the reality that we all end up in the workforce" (Florida School-to-Work Joint Services Office, 1997, p. 1).

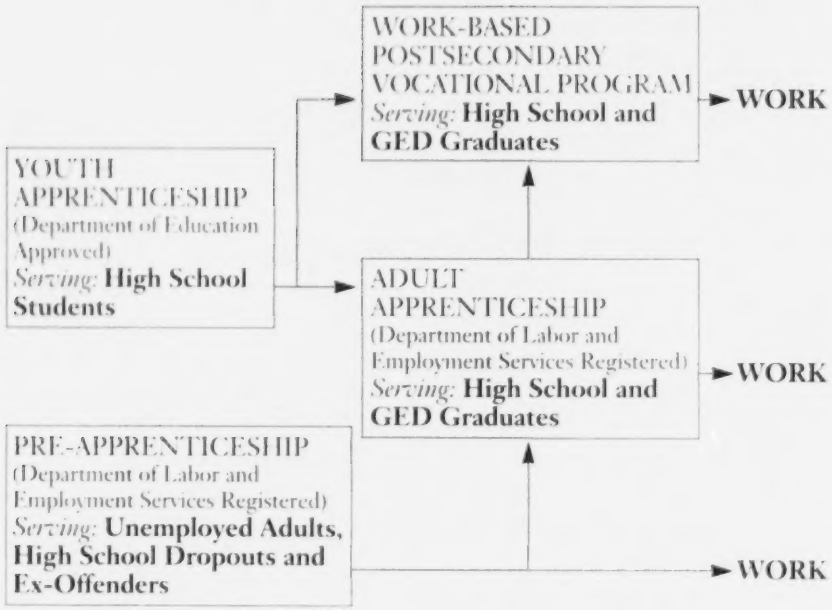
**"School-to-Work is**

- a cooperative initiative of education, labor, business, government, and communities that is designed to broaden the educational, career, and economic opportunities of all youths;
- an educational delivery system focused on careers and built on best practices already in place;
- an educational approach for all students that combines academic learning at school with hands-on learning at a worksite or in a simulated setting;
- an approach that ensures that local needs are met through ongoing community ownership;
- a system of well-marked pathways that students can follow to make the transition from school to a career track" (Florida School-to-Work Joint Services Office, 1997, p.1).

*This schema helps to demonstrate the various programs:*

**SELECTED WORK BASED LEARNING PROGRAM OPTIONS**

**PROGRAMS**




Florida Departments of Education and Labor and Employment Services, 1997

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# APPENDIX B: MEMBERSHIP OF THE FLORIDA EDUCATION AND EMPLOYMENT COUNCIL FOR WOMEN AND GIRLS

| CATEGORY | MEMBER | ADDRESS | PHONE | TERM OF OFFICE |
|---|---|---|---|---|
| Military | **Colonel Jose Bolton, Sr.**<br>Commandant | 740 O'Malley Road<br>Patrick AFB, FL 32925-3399 | 407/494-6976<br>FAX 407/949-7013 | 1996-1999 |
| Hispanic Issues | **Conchy T. Bretos**<br>President | 374 N.W. 92nd St.<br>Miami Beach, FL 33140 | 305/758-3513<br>FAX 305/326-1527 | 1996-1999 |
| Advocacy Group (Young Girls) | **Timothy Caddell**<br>Executive Director | Girls Incorporated of Pinellas<br>7700 61st St. North<br>Pinellas Park, FL 33781 | 727/544-6230<br>FAX 727/545-5575 | 1996-1999 |
| Education Administrative Policy (Vocational Education) | **Robert J. Clark**<br>Senior Executive Director | O-TEC Mid-Florida Tech<br>2900 West Oak Ridge Rd.<br>Orlando, FL 32809-4799 | 407/251-6001<br>FAX 407/858-2239 | 1996-1999 |
| Major Industry (NASA) | **Sue G. Dickinson**<br>Lead | Comprehensive Planning Office<br>Facility Support FF-S3<br>Kennedy Space Center, FL 32899 | 407/867-2975<br>FAX 407/867-1355 | 1996-1999 |
| Education Administrative Policy (Community College) | **Dr. Elena Flom**<br>Associate Vice President for Institutional Advancement | Brevard Community College<br>1519 Clearlake Rd.<br>Cocoa, FL 32922 | 407/632-1111 63004<br>FAX 407/634-3758 | 1996-1999 |
| Education Administrative Policy (Secondary) | **Egle Gallagher**<br>Principal | Stranahan High School<br>1800 S.W. 5th Pl.<br>Ft. Lauderdale, FL 33312 | 954/765-6800<br>FAX 954/765-6839 | 1996-1999 |
| Government | **Rita Garvey**<br>Mayor | City of Clearwater<br>P.O. Box 4748<br>Clearwater, FL 33758 | 727/562-4050<br>FAX 727/562-4052 | 1996-1999 |
| Education Administrative Policy (University) | **Dr. Janie Gooden Greenleaf**<br>Director<br>Barry University | Institute for Professional Development<br>3440 N.E. 192nd Street, 2M<br>Aventura, FL 33180-2422 | 305/931-3840<br>FAX 305/931-3840 | 1997-2000 |
| Education Administrative Policy (School Board) | **Perla Tabares Hantman**<br>School Board Member | Dade County School Board<br>1450 N.E. 2nd Avenue, 700<br>Miami, FL 33132 | 305/955-2782<br>FAX 305/995-2754 | 1997-2000 |
| Education Administrative Policy (K-12) | **Annie S. Harris**<br>Asst. Superintendent for Teaching and Learning | Aquilina Howell Instructional<br>3955 West Pensacola Street<br>Tallahassee, FL 32304 | 850/487-6708<br>FAX/ 850/413-0449 | 1995-1999 |
| Apprenticeships | **Ellen J. Hone**<br>Field Representative<br>U.S. Census Bureau | 5018 Barton Drive<br>Orlando, FL 32807 | 407/ 273-8520 | 1995-1999 |
| Education (Preschool) | **W. Joyce James**<br>Program Coordinator<br>Home Instruction Program For Preschool Youngsters | Hillsborough County Center For Excellence<br>7406 N. Dixon Avenue<br>Tampa, FL 33604 | 813/238-5874<br>FAX 813/247-3729 | 1997-2000 |
| Education (Minority Students) | **Colonel (Ret.) Ronald Joe**<br>Director,<br>Student Activities | Florida A&M University<br>Martin Luther King Blvd.<br>Tallahassee, FL 32304 | 850/599-3400<br>FAX 850/561-1515 | 1997-2000 |
| Workforce Development | **Mary Helen Kress**<br>Executive Director | Suncoast Workforce Development Board<br>1750 17th Street, Bldg J-2<br>Sarasota, FL 34234 | 941/361-6090<br>FAX/941-361-6141 | 1996-1999 |
| Labor | **Chuck Kronz**<br>Business Manager | IBEW Local Union 308<br>4020 80th Avenue N., #8<br>Pinellas Park, FL 34665 | 727/546-4746<br>FAX 727/541-1829 | 1995-1999 |
| Advocacy Group | **Helen H. Landers**<br>President | Florida Women's Consortium<br>321 S.E. 10th Court<br>Ft. Lauderdale, FL 33316 | 954/765-4672<br>FAX 954/765-4437 | 1996-1999 |
| Education Administrative (Technical Education) | **Russell L. Monceriet**<br>Trustee | Seminole Community College<br>250 Betsy Run<br>Longwood, FL 32779 | 407/862-3432<br>FAX 407/788-1174 | 1997-2000 |
| Women's Economic Issues | **Dr. Barbara W. Newell**<br>Former Chancellor,<br>Florida State University System | 1214 Clark Avenue<br>Tallahassee, FL 32301 | 850/656-1214<br>FAX 850/656-1214 | 1995-1999 |

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| | | | | |
|---|---|---|---|---|
| American Indian Issues | **Juanita H. Sandifer**<br>Council Lady | Northwest Florida Creek Indian Council<br>3230 Keating Road<br>Pensacola, FL 32504-7411 | 850/476-5934 | 1997-2000 |
| Apprenticeships | **Janet Skipper**<br>Administrator | Central Florida Joint Training Assn., Inc.<br>2758 N. Forsyth Road<br>Winter Park, FL 32792 | 407/352-1851<br>FAX 407/351-3766 | 1998-2001 |
| Education Administrative Policy (Teacher Education) | **Dr. Steven E. Sorg**<br>Interim Director of Distributed Learning | University of Central Florida<br>12424 Research Pkwy. # 264<br>Orlando, FL 32826 | 407/352-1851<br>FAX 407/207-4911 | 1995-1999 |
| Education Administrative Policy (Equal Opportunity) | **Solomon Stephens**<br>Assistant Superintendent for Equal Opportunity and Employee Relations | Pinellas County Schools<br>301 4th Street, S.W.<br>Largo, FL 33770 | 727/588-6198<br>FAX 727/588-5198 | 1996-2000 |
| Education Administrative (Affirmative Action) | **Charles L. Williams**<br>Affirmative Action/ EEO Coordinator (Ret.) | School District of Escambia<br>6617 Black Oak Place<br>Pensacola, FL 32526 | 850/944-5191 | 1995-1999 |
| Education Administrative Policy (Technical Education) | **Myrtle Williams**<br>Assistant Provost | St. Petersburg Junior College<br>P.O. Box 13489<br>St. Petersburg, FL 33733 | 727/341-4349<br>FAX 727/341-3524 | 1995-1999 |
| Ex-officio Member Equity Administrator | **Barbara Gershman** | Division of Workforce Development<br>Department of Education<br>Turlington Building, Room 714<br>325 West Gaines Street<br>Tallahassee, FL 32399-0400 | 850/413-0803<br>FAX 850/487-1745 | |
| Staff | **Kathleen B. McKenzie**<br>Executive Director | 2155 Mills Road<br>Jacksonville, FL 32216 | 904/725-8009<br>FAX 904/725-1483 | |

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## APPENDIX C: PROGRAM OF THE COUNCIL 1997-1998

The Council held three meetings, two issues forums, one focus group, and one joint meeting with the Florida Women's Conference and one joint meeting with Florida Chapter of American Association of University Women between July 1, 1997 and July 16, 1998. In addition, the Executive Committee and Program of Work Committee met prior to each meeting. The calendar included the following meetings:

| | | |
|---|---|---|
| October | 26-27 | Joint Meeting with Florida Women's Conference |
| | 27-28 | Issues Forum<br>Regular Meeting<br>Tampa |
| February | 11-12 | Issues Forum<br>Regular Meeting<br>Orlando |
| April | 15-16 | Issues Forum<br>Regular Meeting |
| | 17 | Joint Meeting with Florida Chapter of<br>American Association of University Women<br>Sarasota and Bradenton |
| July | 16 | Focus Group<br>Orlando |

The regular meetings, the issues forums, and the focus group provided the Council an opportunity to hear from speakers concerned with issues related to meeting the educational and support services needs of Florida's women and girls.

### Public Issues Forum, October 27

### Teen Pregnancy, Domestic Violence and New Legislation

**Rick Leo**, Prosecuting Attorney in Hillsborough County in the Sex Offender Division, addressed the Council on the existing law as it pertains to children and teenage girls, the difficulties involved in prosecution of adult sex offenders, and the similar record of prosecutions in other states with similar statutes.

**Senator Paul Welstone** – A tape recording of an address to the Florida Governor's Conference on domestic violence was played for and discussed by the Council.

**Bob Clark** spoke about Florida Law 1688, which establishes a standard length and credit for vocational education throughout the state of Florida with articulation between technical centers and community colleges.

### Public Issues Forum, February 11

### Apprenticeships

**Jamie Buck**, Executive Director, Academy of Construction Trades, Inc., spoke on the apprenticeship program that starts in high school and a mentoring program to help promote longevity in nontraditional careers and prevent sexual harassment. Her concern is the low rate (1/2-1%) of participation by women and girls in these careers. Ms. Buck's efforts in recruitment include speaking to classes, but requires more support from schools and individual teachers.

**Jamie Fugate**, Program Director, Florida Electrical Apprenticeship and Training, described the seven semester non-union apprenticeship program in Orlando. She indicated that the program enrolls approximately 25 percent minority students and five percent women. Ms. Fugate reported that there are two types of barriers to women's greater participation, internal and external. She said sexual harassment might be more of a perceived barrier than an actual one. Other barriers include a poor perception of what construction workers do and a misconception of the strength needed to perform job tasks. Women need a support system, mentors—both female and male—and better information on the quality of the benefits packages offered by employers.

**Buzz Stephens**, Program Director for Job Training Partnership Act (JTPA), Section 1233, spoke about the provisions of JTPA that affect women. Mr. Stephens indicated that the legislation encourages literacy and nontraditional training for women, but it is not a required activity and there are no performance standards for those activities. Local Workforce Development Boards allocate 80 percent of the state money to the programs that they deem useful in helping people get off welfare and get a job.

**Janet Skipper**, Assistant Training Director (Recently named Administrator), Central Florida Electrical JATC (Joint Apprentice Training Committee), spoke about her experiences as an apprentice, journeyman, and trainer of apprentices. Ms. Skipper views recruitment of women to the industry as crucial to the trade and to women; she recruits women to apprenticeships by talking to elementary and high schools students, acting as a mentor, and encouraging job shadowing. She feels that education for technological careers must begin in early years with lessons and experiences in various aspects of industry.

**Public Issues Forum, April 15**

**Apprenticeships and Nontraditional Career Training**

**Honorable Doug Jamerson**, Secretary of Labor, State of Florida, stated that apprenticeship training for women is a "very timely matter." He indicated that not enough women are applying because of a lack of awareness, interest, understanding of the work and benefits, and lack of familiarity with examples of successful women in the trades; there needs to be a break down of the stereotypes and myths about women. Secretary Jamerson indicated he would like to see a change in terms from "vocational education" to "applied technology."

**Rhonda Sparks**, Local Training Coordinator, Florida Center for Manufacturing Excellence, talked about the program, operating on a Trade and Tourism Grant, that she coordinates and that is open to everyone—teens to sixties, high school graduates, drop-outs, lay-offs retraining and WAGES clients. It is an industry-driven partnership with schools. Ms. Sparks cited problems from her point of view: The perception of trades in the populace and in educational institutions, lack of career assessment, counseling, and goal-setting in schools, the portrayal of trades as second-choice to college, the perception of females pitted against males and lack of courses in employability skills and systems of work.

**Kris Pike**, Manager, Armstrong Brothers Plumbing, Bradenton, is finishing her five-year apprenticeship program, has been working in plumbing for those five years, and now is the general manager for a plumbing contractor. Ms. Pike talked about her experiences as an apprentice, the barriers she experienced and the satisfaction she has found in her chosen career.

**Joe Stephens**, Administrator, Apprenticeship Section, Bureau of Workforce Program Support, Department of Labor, State of Florida, spoke

on apprenticeships in Florida. He indicated that the mandate of his office is to promote, register, service and monitor apprenticeships. Mr. Stephens said that Title 29 CFR on Affirmative Action Regulations sets goals of women participants at half the female workforce of the state. He also said that crafts are not low-tech anymore. He recommended an expansion of outreach, educating the industry, educating educators, collecting more accurate data, and establishing more apprenticeship programs in manufacturing in Florida.

**Donna Beasley**, Operations Management Consultant, Apprenticeship Section, Bureau of Workforce Program Support, Department of Labor, Bradenton, discussed her perceptions of the situation in the field in apprenticeship programs. She said OSHA has helped to temporize the workload, which benefits females.

**Focus Group, July 16**

**Apprenticeships and Nontraditional Career Training**

A focus group of Council members with particular expertise in apprenticeships held an in-depth discussion of the issues of accessing apprenticeship programs for women.

**Council Annual Awards Program**

The Council conducted its eighth annual awards program to honor exemplary programs and practices for outstanding achievement in, or service to, equity in education and employment for women and girls.

The **Gretna Presbyterian Church**, Gretna, Florida received the award for an organization that has contributed outstanding service or support on behalf of equity in education. In response to the hurdles continually faced by women enrolled in vocational courses, the church set up an emergency fund for situations not covered immediately by other grants and sources, sent messages of support, provided Christmas toys and clothing for children and single mothers, and served as a continuing source of assistance and support to these families.

**Project Women Can** in West Palm Beach was recognized as an organization that has contributed outstanding service or support on behalf of equity in education. As a job training program, targeting a minimum of fifty women a year who are unemployed or under employed, Project Women Can teaches students to become cabinetmaker/carpenter's helpers in 22 weeks. The program also teaches entrepreneurial skills, furniture repair, home repair, interior trim carpentry and refinishing. Volunteer trainers work to develop women's skills in an economically depressed region where there are many barriers to women's employment.

**Orange County Public Schools** received the award for an exemplary school district that has contributed outstanding service or support on behalf of equity in education. Orange County Public Schools has established the Single Parent Program as a separate department; has actively recruited women for nontraditional training; funded a job developer position full-time in the Equity Department for ten years; has hosted the local chapter of the American Association of University Women, showing its support of educational equity for women and girls; has pledged its continued support of the Equity Department when funding ends; has awarded good used cars rehabilitated by the Automotive Department to deserving students; and recognized the Equity Coordinator as Mid-Florida Tech's Teacher of the Year.

**Adele Abbott**, owner and president of the Army/Navy Outdoor Store in West Palm Beach, was recognized as the outstanding leader in support of women and girls in vocational education. She has been a member of the

Advisory Board for the Single Parent Displaced Homemaker Programs at Palm Beach Community College for twelve years, serving two years as president. Ms. Abbott hired and trained a 72-year-old woman from the Displaced Homemaker Program for her store; served as a regional judge for the Florida Outstanding Nontraditional Students Awards; housed and provided access to a Professional Clothes Closet for Women's Center students going to interviews or starting a new job; and promoted a $1500 yearly scholarship awarded by the Women's Chamber of Commerce for women vocational students at Palm Beach Community College.

The Council presented a lifetime achievement award to **Charlotte C. Gore** for her dedication and commitment to Florida's women and girls. As the Florida Gender Equity Administrator for 17 years, she brought Florida to a position of national leadership in vocational equity issues and influenced federal and state policy and funding through her ability to analyze, persuade, and build consensus. She continues her support of women and girls in vocational education today as the Director of the Lorenzo Walker Institute of Technology in Naples Florida.

The Council recognized **Frank T. Brogan**, Secretary of Education, State of Florida, and **Joseph E. Stephens**, Director, Division of Workforce Development, Department of Education, for their commitment and support of equity in education.

**Dr. Carol J. Darling** received Special Recognition for service to the Florida Education and Employment Council for Women and Girls for her nine-year tenure as the Executive Director during which time she worked unstintingly in support and service to educational equity and the women and girls of Florida. Dr. Darling continues her dedication to education at the University of Central Florida.

## APPENDIX D: 1998-1999 SINGLE PARENTS, DISPLACED HOMEMAKERS, AND SINGLE PREGNANT WOMEN PROGRAMS

The following is a list of the Single Parents, Displaced Homemakers and Single Pregnant Women programs in Florida that have received federal support from the Carl D. Perkins Vocational and Applied Technology Act of 1990. The funding agency for the program is the Equity Administration, Division of Workforce Development, Florida Department of Education.

Aspira of Florida, Inc.
Raul Martinez
3650 N. Miami Avenue
Miami, FL 33127
Phone: (305)576-1512
Fax: (305)576-0810

Bay County Schools
Sandra Davis
3016 Highway 77
Panama City, FL 32405
Phone: (850)747-5563
Fax: (850)747-5504

Bradford County Schools
James E. Ward
609 N. Orange Street
Starke, FL 32091
Phone: (904)966-6760
Fax: (904)966-6786

Brevard Community College
Tom Denison
1519 Clearlake Road
Cocoa, FL 32922
Phone: (407)632-1111 64430
Fax: (407)634-4565

Broward Community College
Debra Allen
1515 West Commercial Blvd.
Ft. Lauderdale, FL 333089
Phone: (954)761-7516
Fax: (954)766-7137

Broward County Schools
John. J. Miracola
K.C. Wright Administration Bldg.
Ft. Lauderdale, FL 333301-3125
Phone: (954)765-6089
Fax: (954)765-6954

Broward County Schools
Annette Zylinski
K.C. Wright Administration Bldg.
Ft. Lauderdale, FL 333301-3125
Phone: (954)760-7404
Fax: (954)765-6954

Central Florida Community College
Don Hunt
3001 SW College Road
Ocala, FL 34474
Phone: (352)873-5828
Fax: (352)873-5882

Charlotte County Schools
Judith Willis
18300 Blade Blvd.
Port Charlotte, FL 33948-3399
Phone: (941)255-7500 101
Fax: (941)255-7509

Collier County Schools
David Baldata
3702 Estey Avenue
Naples, FL 33942
Phone: (941)643-0919
Fax: (941)643-7462

Daytona Beach Community College
Katherine German
P.O. Box 2811
Daytona Beach, FL 32120-2811
Phone: (904)254-4426
Fax: (904)254-4458

Edison Community College
Deborah Hopkins
8099 College Parkway Southwest
Ft. Myers, FL 33906-6210
Phone: (941)489-9270
Fax: (941)489-9418

Escambia County Schools
Tommy Taylor
30 East Texar Drive
Pensacola, FL 32503
Phone: (850)469-5304
Fax: (850)469-5640

Florida Community College at Jacksonville
Judy Stephenson
Martin Center
501 West State Street, Rm. 359
Jacksonville, FL 32202
Phone: (904)632-3291
Fax: (904)356-5681

Florida Keys Community College
Michell A. Grabois
5901 W. College Road
Key West, FL 33040
Phone: (305)296-9081 218
Fax: (305)292-5155

Gadsden County Schools
Reginald James
201 Martin Luther King Blvd.
Quincy, FL 32351
Phone: (850)627-9651
Fax: (850)627-2760

Greater Miami Service Corps
Hubert James
810 Northwest 28th Street
Miami, FL 33127
Phone: (305)638-4672 238
Fax: (305)633-5319

Gulf Coast Community College
Lewis Baber
5230 W. Highway 98
Panama City, FL 32401-1041
Phone: (850)872-3808
Fax: (850)747-3228

Gulf County Schools
Sarah Joe Wooten
Office of Instructional Services
150 Middle School Road
Port St. Joe, FL 32456
Phone: (850)229-6940
Fax: (850)229-6089

Heart of Florida Girl Scouts
E. Kay Anderson
1831 N. Gilmore Avenue
Lakeland, FL 33805
Phone: (941)688-7648 16
Fax: (941)682-5122

Hillsborough Community College
Sherry Kersey
Technical Programs
P.O. Box 5096
Tampa, FL 33675-5096
Phone: (813)253-7022
Fax: (813)253-7196

Hillsborough County Schools
Pam Cunningham
Erwin Technical Center
2010 E. Hillsborough Avenue
Tampa, FL 33610
Phone: (813)231-1859
Fax: (813)231-1969

Indian River Community College
Patti Williams
3209 Virginia Avenue
Ft. Pierce, FL 34981-5599
Phone: (561)462-4246
Fax: (561)462-4796

Indian River County Schools
Ruth Shaw
1990 25th Street
Vero Beach, FL 32960
Phone: (561)564-3031
Fax: (561)569-0424

Lake City Community College
Janice Irwin
Route 19, Box 1030
Lake City, FL 32025-8703
Phone: (904)752-1822 1215
Fax: (904)755-1856

Lake-Sumter Community College
Janice Adkinson
9501 U.S. Highway 441
Leesburg, FL 34788-8751
Phone: (352)323-3609
Fax: (352)323-3624

Leon County Schools
Robert J. Gill
500 N. Appleyard Dr.
Tallahassee, FL 32304
Phone: (850)487-7401
Fax: (850)922-3880

Manatee County Schools
Margot Joynes
5603 34th Street W.
Bradenton, FL 34210-5297
Phone: (941)751-7922
Fax: (941)751-7927

Martin County Schools
Peggy Mannering
500 E. Ocean Blvd.
Stuart, FL 34994
Phone: (561)287-6400 269
Fax: (561)223-1648

Miami-Dade Community College
Barbara Echord
300 N.E. Second Ave., Rm. 5501
Miami, FL 33132-2297
Phone: (305)237-7440
Fax: (305)237-7460

North Florida Community College
Morris Steen, Jr.
1000 Turner Davis Drive
Madison, FL 32340
Phone: (850)973-1614
Fax: (850)973-5690

Okaloosa-Walton Community College
Ned Couey
100 College Blvd.
Niceville, FL 32578
Phone: (850)729-5366
Fax: (850)729-5278

Orange County Schools
Jacquelyn T. Page
445 W. Amelia St.
Orlando, FL 32801-1127
Phone: (407)317-3200 2873
Fax: (407)317-3343

Palm Beach Community College
Joan E Holcomb
Career and Technical Education
4200 Congress Avenue
Lake Worth, FL 33461
Phone: (561)439-8085
Fax: (561)439-8369

Pensacola Junior College
Ann Southerland
1000 College Blvd., Bldg. 7
Pensacola, FL 32504-8998
Phone: (850)484-1764
Fax: (850)484-1626

Pinellas County Schools
Karl Nonsiaiven
301 4th St., S.W.
Clearwater, FL 33770-3536
Phone: (727)588-6321
Fax: (727)588-6202

Polk Community College
Stephen Hull
Career & Special Projects
999 Avenue H, NE
Winter Haven, FL 33881-4299
Phone: (941)297-1094
Fax: (941)297-1034

Polk County Schools
Shelba Lawhon
1275 South Broadway
Bartow, FL 33830
Phone: (941)534-7492
Fax: (941)534-7494

Santa FeCommunity College
Patsy Frenchman
3000 N.W. 83rd St., S-251
Gainesville, FL 32606
Phone: (352)395-5507 5270
Fax: (352)395-5981

Santa Rosa County Schools
Raymond Rogers
603 Canal Street
Milton, FL 32570-6706
Phone: (850)983-5058
Fax: (850)983-5067

Santa Rosa County Schools
Carol Calfee
503 Berrchill Road
Milton, FL 32570
Phone: (850)983-5054
Fax: (850)983-5017

Seminole Community College
Suzanne Tesinsky
100 Weldon Blvd.
Sanford, FL 32773-6199
Phone: (407)328-2186
Fax: (407)328-2326

Seminole County Schools
Bettie Hogle
400 East Lake Mary Blvd.
Sanford, FL 32773-7127
Phone: (407)320-0175
Fax: (407)320-0294

South Florida Community College
Michele Roberts
600 W. College Drive
Avon Park, FL 33825
Phone: (941)453-6661 164
Fax: (941)453-9442

St. Johns County Schools
Mary Alice Allman
St. Augustine Technical Center
2980 Collins Avenue
St. Augustine, FL 32095-1919
Phone: (904)829-1075
Fax: (904)824-6750

St. Lucie County Schools
Mark Hueter
Means Court Center
532 N. 13th Street, Room 208
Ft. Pierce, FL 34950
Phone: (561)468-5240
Fax: (561)468-5177

St. Petersburg Junior College
Sandra Cassity
Health Education Center,
7200 66 St.
N. Pinellas Park, FL 33781
Phone: (727)341-3353
Fax: (727)341-3270

The Spring of Tampa Bay, Inc.
Mabel H. Bexley
P.O. Box 4772
Tampa, FL 33677
Phone: (813)247-5433 312
Fax: (813)247-2930

University of Central Florida
Steven E. Sorg
12424 Research Parkway, 264
Orlando, FL 32826
Phone: (407)207-4913
Fax: (407)207-4911

University of South Florida
Wendy Helton
HMS 413, Room 480
4202 E. Fowler Avenue
Tampa, FL 33620-3410
Phone: (813)974-3321
Fax: (813)974-8363

Valencia Community College
Joan Tiller
P.O. Box 3028, DTC 3
Orlando, FL 32802-3028
Phone: (407)299-5000 3327
Fax: (407)628-0689

Washington County Schools
Paul Parker
757 Hoyt Street
Chipley, FL 32428
Phone: (850)638-1180 301
Fax: (850)638-6177

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## APPENDIX E: 1998-1999 GENDER EQUITY PROGRAMS

The following is a list of the Single Parents, Displaced Homemakers and Single Pregnant Women programs in Florida that have received federal support from the Carl D. Perkins Vocational and Applied Technology Act of 1990. The funding agency for the program is the Equity Administration, Division of Workforce Development, Florida Department of Education.

Broward County Schools
John. J. Miracola
K.C. Wright Administration Bldg.
Ft. Lauderdale, FL 33301-3125
Phone: (954)765-6089
Fax: (954)765-6954

Daytona Beach Community College
Katherine German
P.O. Box 2811
Daytona Beach, FL 32120-2811
Phone: (904)254-4426
Fax: (904)254-4458

Florida Community College at Jacksonville
Judy Stephenson
Martin Center
501 West State Street, Rm. 359
Jacksonville, FL 32202
Phone: (904)632-3291
Fax: (904)356-5681

Gulf Coast Community College
Lewis Baber
5230 W. Highway 98
Panama City, FL 32401-1041
Phone: (850)872-3808
Fax: (850)747-3228

Hillsborough County Schools
Pam Cunningham
Erwin Technical Center
2010 E. Hillsborough Avenue
Tampa, FL 33610
Phone: (813)231-1859
Fax: (813)231-1969

Indian River Community College
Patti Williams
3209 Virginia Avenue
Ft. Pierce, FL 34981-5599
Phone: (561)462-4246
Fax: (561)462-4796

Lake City Community College
Janice Irwin
Route 19, Box 1030
Lake City, FL 32025-8703
Phone: (904)752-1822 1215
Fax: (904)755-1856

Orange County Schools
Jacquelyn T. Page
445 W. Amelia St.
Orlando, FL 32801-1127
Phone (407)317-3200 2873
Fax: (407)317-3343

Pensacola Junior College
Ann Southerland
1000 College Blvd., Bldg. 7
Pensacola, FL 32504-8998
Phone: (850)484-1764
Fax: (850)484-1826

Santa Fe Community College
Patsy Frenchman
3000 N.W. 83rd St., S-251
Gainesville, FL 32606
Phone: (352)395-5507 5270
Fax: (352)395-5981

Seminole Community College
Suzanne Tesinsky
100 Weldon Blvd.
Sanford, FL 32773-6199
Phone: (407)328-2186
Fax: (407)328-2326

South Florida Community College
Michele Roberts
600 W. College Drive
Avon Park, FL 33825
Phone: (941)453-6661 164
Fax: (941)453-9442

St. Johns County Schools
Mary Alice Allman
St. Augustine Technical Center
2980 Collins Avenue
St. Augustine, FL 32095-1919
Phone: (904)829-1075
Fax: (904)824-6750

University of Central Florida
Steven E. Sorg
12424 Research Parkway, 264
Orlando, FL 32826
Phone: 407)207-4913
Fax: (407)207-4911

University of South Florida
Wendy Helton
HMS 413, Room 480
4202 E. Fowler Avenue
Tampa, FL 33620-3410
Phone: (813)974-3321
Fax: (813)974-8363

Valencia Community College
Joan Tiller
P.O. Box 3028, DTC 3
Orlando, FL 32802-3028
Phone: (407)299-5000 3327
Fax: (407)628-0689

Washington County Schools
Paul Parker
757 Hoyt Street
Chipley, FL 32428
Phone: (850)638-1180 301
Fax: (850)638-61

## APPENDIX F: WOMEN IN APPRENTICESHIPS AND NONTRADITIONAL OCCUPATIONS (WANTO) ACT

Pubinc Law 102-530, signed October 27, 1992

Under an Interagency Agreement, the Women's Bureau (WB) of the Department of Labor and the Bureau of Apprenticeship and Training (BAT)/Employment and Training Administration (ETA) co-administer the WANTO Act.

The WANTO Act provides for:

- Outreach to Employers and Labor Unions
- Technical Assistance to Community Based Organizations
- Liaison Role of Department of Labor between employer, labor, and the community-based organizations providing technical assistance; coordination; conducting regular assessment; and seeking input of employers and labor unions.
- Study of the Barriers to the participation of women in apprenticeable Occupations and Nontraditional.

**§ 2501. Findings; statement of purpose**

- (a) Findings
  The Congress finds that –
  - (1) American businesses now and for the remainder of the 20th century will face a dramatically different labor market than the one to which they have become accustomed;
  - (2) two in every three new entrants to the work force will be women, and to meet labor needs such women must work in all occupational areas including in apprenticeable occupations and nontraditional occupations;
  - (3) women face significant barriers to their full and effective participation in apprenticeable occupations and nontraditional occupations;
  - (4) the business community must be prepared to address the barriers that women have to such jobs, in order to successfully integrate them into the work force; and
  - (5) few resources are available to employers and unions who need assistance in recruiting, training, and retaining women in apprenticeable occupations and other nontraditional occupations.
- (b) Purpose
  It is the purpose of this chapter to provide technical assistance to employers and labor unions to encourage employment of women in apprenticeable occupations and nontraditional occupations. Such assistance will enable business to meet the challenge of Workforce 2000 by preparing employers to successfully recruit, train, and retain women in apprenticeable occupations and nontraditional occupations and will expand the employment and self-sufficiency options of women. This purpose will be achieved by –
  - (1) promoting the program to employers and labor unions to inform them of the availability of technical assistance which will assist them in preparing the workplace to employ women in apprenticeable occupations and nontraditional occupations;
  - (2) providing grants to community-based organizations to deliver technical assistance to employers and labor unions to prepare them to recruit, train, and employ women in apprenticeable occupations and nontraditional occupations;
  - (3) authorizing the Department of Labor to serve as a liaison between employers, labor, and the community-based organizations providing



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technical assistance, through its national office and its regional administrators; and

- (4) conducting a comprehensive study to examine the barriers to the participation of women in apprenticeable occupations and nontraditional occupations and to develop recommendations for the workplace to eliminate such barriers.

**§ 2502. Outreach to employers and labor unions**

- (a) In general

With funds available to the Secretary of Labor to carry out the operations of the Department of Labor in fiscal year 1994 and subsequent fiscal years, the Secretary shall carry out an outreach program to inform employers of technical assistance available under section HYPERLINK "2503.shtml" 2503(a) of this title to assist employers to prepare the workplace to employ women in apprenticeable occupations and other nontraditional occupations.

- (1) Under such program the Secretary shall provide outreach to employers through, but not limited to, the private industry councils in each service delivery area.
- (2) The Secretary shall provide outreach to labor unions through, but not limited to, the building trade councils, joint apprenticeable occupations councils, and individual labor unions.

(b) Priority

The Secretary shall give priority to providing outreach to employers located in areas that have nontraditional employment and training programs specifically targeted to women.

**§ 2503. Technical assistance**

- (a) In general

With funds appropriated to carry out this section, the Secretary shall make grants to community-based organizations to provide technical assistance to employers and labor unions selected under subsection (b) of this section. Such technical assistance may include –

- (1) developing outreach and orientation sessions to recruit women into the employers' apprenticeable occupations and nontraditional occupations;
- (2) developing preapprenticeable occupations or nontraditional skills training to prepare women for apprenticeable occupations or nontraditional occupations;
- (3) providing ongoing orientations for employers, unions, and workers on creating a successful environment for women in apprenticeable occupations or nontraditional occupations;
- (4) setting up support groups and facilitating networks for women in nontraditional occupations on or off the job site to improve their retention;
- (5) setting up a local computerized database referral system to maintain a current list of tradeswomen who are available for work;
- (6) serving as a liaison between tradeswomen and employers and tradeswomen and labor unions to address workplace issues related to gender; and
- (7) conducting exit interviews with tradeswomen to evaluate their on-the-job experience and to assess the effectiveness of the program.

- (b) Selection of employer and labor unions

The Secretary shall select a total of 50 employers or labor unions to receive technical assistance provided with grants made under subsection (a) of this section.

**§ 2504. Competitive grants**

- (a) In general

  Each community-based organization that desires to receive a grant to provide technical assistance under section 2503(a) of this title to employers and labor unions shall submit an application to the Secretary at such time, in such manner, and accompanied by such information as the Secretary may reasonably require.

- (b) Priority

  In awarding grants under section 2503(a) of this title, the Secretary shall give priority to applications from community-based organizations that –

  - (1) demonstrate experience preparing women to gain employment in apprenticeable occupations or other nontraditional occupations;
  - (2) demonstrate experience working with the business community to prepare them to place women in apprenticeable occupations or other nontraditional occupations;
  - (3) have tradeswomen or women in nontraditional occupations as active members of the organization, as either employed staff or board members; and
  - (4) have experience delivering technical assistance.

**§ 2505. Applications**

To be eligible to be selected under section 2503(b) of this title to receive technical assistance provided with grants made under section 2503(a) of this title, an employer or labor union shall submit an application to the Secretary at such time, in such manner and containing or accompanied by such information as the Secretary may reasonably require. At a minimum, the application should include –

- (1) a description of the need for technical assistance;
- (2) a description of the types of apprenticeable occupations or nontraditional occupations in which the employer or labor union would like to train or employ women;
- (3) assurances that there are or will be suitable and appropriate positions available in the apprenticeable occupations program or in the nontraditional occupations being targeted; and
- (4) commitments that reasonable efforts shall be made to place qualified women in apprenticeable occupations or nontraditional occupations.

**§ 2506. Liaison role of Department of Labor**

The Department of Labor shall serve as a liaison among employers, labor unions, and community-based organizations. The liaison role may include –

- (1) coordination of employers, labor unions, and community-based organizations with respect to technical assistance provided under section 2503(a) of this title;
- (2) conducting regular assessment meetings with representatives of employers, labor unions, and community-based organizations with respect to such technical assistance; and
- (3) seeking the input of employers and labor unions with respect to strategies and recommendations for improving such technical assistance.

**§ 2507. Study of barriers to participation of women in apprenticeable occupations and nontraditional occupations**

- (a) Study

  With funds available to the Secretary to carry out the operations of the Department of Labor in fiscal years 1994 and 1995, the Secretary shall conduct a study of the participation of women in apprenticeable occupations and nontraditional occupations. The study shall examine –

- (1) the barriers to participation of women in apprenticeable occupations and nontraditional occupations;
- (2) strategies for overcoming such barriers;
- (3) the retention rates for women in apprenticeable occupations and nontraditional occupations;
- (4) strategies for retaining women in apprenticeable occupations and nontraditional occupations;
- (5) the effectiveness of the technical assistance provided by the community-based organizations; and
- (6) other relevant issues affecting the participation of women in apprenticeable occupations and nontraditional occupations.

- (b) Report

Not later than 2 years after October 27, 1992, the Secretary shall submit to the Congress a report containing a summary of the results of the study described in subsection (a) of this section and such recommendations as the Secretary determines to be appropriate.

**§ 2508. Definitions**

For purposes of this chapter:

- (1) The term "community-based organization" means a community-based organization as defined in section 1503(5) of this title, that has demonstrated experience administering programs that train women for apprenticeable occupations or other nontraditional occupations.
- (2) The term "nontraditional occupation" means jobs in which women make up 25 percent or less of the total number of workers in that occupation.
- (3) The term "Secretary" means the Secretary of Labor.

**§ 2509. Technical assistance program authorization**

There is authorized to be appropriated $1,000,000 to carry out section 2503 of this title.

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## WANTO GRANTEES:

**WANTO Year 1 – September 1994**

- Chicago Women in the Trades (Michigan, Minnesota, Ohio, Wisconsin)
- Tradeswomen of Purpose/Women in Nontraditional Work, Inc. (Pennsylvania)
- Wider Opportunity for Women (California, Montana, Washington, D.C.)
- Women Unlimited (Maine, Vermont, Massachusetts)
- YWCA of Greater Memphis (Arkansas, Mississippi, Tennessee)

**WANTO Year 2 – September 1995**

- Home Builders Institute (Washington, DC)
- International Masonry Institute (New Jersey, Chicago IL, Seattle WA, New England)
- National Council of La Raza (Arizona, New Mexico)

**WANTO Year 3 – September 1996**

- Chicago Women in the Trades (Chicago IL, Cleveland OH, Madison WI, Milwaukee WI)
- Women in Nontraditional Employment Roles (California)
- Wider Opportunity for Women (Nationwide)
- YWCA of Greater Memphis (Eight State Region)

**WANTO Year 4 – September 1997**

- Mi Casa Resource Center (Colorado)
- Nontraditional Employment for Women (New York)
- Wider Opportunity for Women (Nationwide)

**WANTO Year 5 – September 1998**

- Century Housing Corporation's Women's Employment Program (Los Angeles CA)
- Chicago Women in the Trades (Chicago IL)
- Oregon Tradeswomen Network (Portland Or)
- STRIVE/East Harlem Employment Service (New York NY)
- The Urban Family Institute (UFI) (Washington DC)
- Women in the Building Trades (Boston and Springfield MA)
- Women Work! (Four site nationwide)

## APPENDIX G: USEFUL RESOURCES FOR WOMEN IN THE TRADES, EDUCATORS, APPRENTICESHIP PROGRAMS AND EMPLOYERS

### Books and Brochures:

***Tools for Success: A Manual for Tradeswomen***

–A helpful booklet especially for apprentices or women considering a career in the trades.

***Breaking New Ground: Worksite 2000***

–"Offers recommendations for all sectors of the construction industry: contractors, unions, training programs and public agencies. It also offers guidelines for model construction worksites.

***Building Equal Opportunity: Six Affirmative Action Programs for Women Construction Workers***

–An evaluation of six worksites and how affirmative action increased employment for women in high-wage careers.

*Available from:*
Chicago Women in Trades
220 South Ashland Avenue, Suite 101
Chicago, IL 60607
312/942-1444
FAX 312/942-0802

***Apprenticeship Survival Guide: Surviving Your Apprenticeship with Style, Grace and Humor!***

–Written by Deborah Yates, this booklet provides practical information and useful guidance for all apprentices, women, men, and minorities.

*Available from:*
Day Publications
P.O. Box 17433
Portland, OR 97217

***WANTO Technical Assistance Manual***

A manual designed to provide job creators and other community-based organizations and institutions with information about women and nontraditional occupations and ideas and tools to increase women's access to these jobs.

*Available from:*
Women's Resource Center of Greater Grand Rapids (Michigan)
616/458-5443

***Gender Differences at Work: Women and Men in Nontraditional Occupations,***

–Written by Christine L. Williams, $15.95.

Available at bookstores and online bookstores

***Nuts & Bolts of NTO: How to Help Women Enter Nontraditional Occupations***

–Written by Jo Shuchat Sanders, $26.50.

Available at bookstores and online bookstores

***Hard Hatted Women: Stories of Struggle and Success in the Trades***

–Written by Molly Martin, $10.95.

Available at bookstores and online bookstores

*Training, Placing, and Retaining Women in Nontraditional Jobs Manual*

–A 300-page, hands-on resource binder provides proven techniques.

*Technical Assistance Package for Working with Unions*

–Provides guidelines for working with local unions to recruit, train and retain women in NTOs.

Available from Workplace Solutions: Resource Clearinghouse

World Wide Web address:
http://www.workplacesolutions.org/resource/pubs1.cfr

*We'll Call You If We Need You: Experiences of Women Working Construction*

–Written by Susan Eisenberg

Available at bookstores and online bookstores

## Organizations and Other Resources

**Wider Opportunity for Women, funded by the 1992 WANTO Act**
Provides a Clearinghouse for information, technical assistance, and on-line services. (For more information, refer to Appendix G.)

**Workplace Solutions Project:** "Wider Opportunities for Women (WOW) created the Workplace Solutions Project to develop and maintain an online resources and services network and service for employers and unions who want to increase the access of women and people of color to apprenticeships and nontraditional occupations and to enhance their success and retention on the job."

World Wide Web address:
http://www.workplacesolutions.org/sitemap/index.html

"The Workplace Solutions Project is supported by the Department of Labor's Women's Bureau and Bureau of Apprenticeship and Training and is funded under the **Women in Apprenticeship and Nontraditional Occupations Act (WANTO)**. WANTO provides funding for community-based organizations to provide resources and services to employers and unions on how to recruit and retain women in nontraditional jobs."

## Workplace Solutions Services:

**Technical Assistance:**

- Issue Overviews: Overview of key issues related to integrating women into nontraditional jobs, including a discussion of each issue and the key elements necessary to ensure that issue will be adequately addressed.
- Self-Assessment: Information on developing and implementing the specific policies and strategies that you have selected from a Customized Solutions Checklist, based on the best practices of employers and unions in common areas of concern on integrating women in nontraditional jobs.
- Ask a Question: Answers to your specific questions and concerns related to any aspect of integrating and retaining women in your workplace.
- Onsite Consulting: Contact with an expert to work with you onsite.

**Technical Assistance Addresses Issues Of:**

- Recruitment
- Orientation and Assignment
- Training
- Retention
- Prevention of Sexual Harassment

**Workplace Solutions can help:**

- Develop recruitment strategies, training programs, and orientations.
- Prepare your workplace and workforce to receive female workers.
- Take steps to retain current and future female workers.
- Prevent sexual harassment in your workplace.

**WANTO Grant Products available through Workplace Solutions:**

**Chicago Women in the Trades:**
*Preventing Sexual Harassment on the Job: A Training Manual*

**Homebuilders Institute:**
*Opening New Doors in Residential Construction: A Manual for Employer Seeking to Hire Women for Nontraditional Occupations*
*Opening New Doors to the American Dream Video and Guide*

**International Masonry Institute:**
***Building Your Future***
*Building Your Future Video*

**National Council of La Raza:**
***Latinas in the Workforce: The Nontraditional Alternative***

**Tradeswomen of Purpose/Women in Nontraditional Work, Inc. (TOP/WIN):**
*Workplace Diversity: Achieving a Unified Workforce Trainer's Manual*
*Tools of the Trade: A Woman's Guide to the IUOE*

**Wider Opportunity for Women:**
*Workplace Solutions: The Union Guide*
*Workplace Solutions: The Employer Guide*

**Women's Resource Center of Greater Grand Rapids:**
*WANTO Technical Assistance Manual*

**YWCA of Greater Memphis:**
*Training for the 21st Century: Regional Resource Guide for the Mid-South*

**Working Women Working Together**, sponsored by AFL-CIO is a network of working women.

World Wide Web address:
http://135.145.100/women/

**Project N.A.I.L.**, National Assistance and Information Link, a Page for Working Women, is a program to assist women interested in working in nontraditional, gender-stereotyped fields. "Our primary goal is to provide services which expand women's employment opportunities to become self sufficient." They note that "95 percent of all job categories are nontraditional for women" and that "jobs pay an average of 30 percent more."

World Wide Web address:
http://www.azaflcio.org/Nail.html

**Women Work! The National Network for Women's Employment.**
Through ongoing training and technical assistance, Women Work! works with local programs, federal, state and local government agencies and other women's economic justice advocates to assure women's education and training programs. Special projects, publications, and other resource materials are available.

World Wide Web address:
http://womenwork.org/about.htm

**IWITTS – Institute for Women in Trades, Technology and Science**
Dedicated to integrating women into nontraditional careers by providing training and technical assistance and publications to the educational system and employers.

World Wide Web address:
http://www.serve.com/iwitts/index.htm

**Women CONNECT**
An on-line regional career search. A woman may look up job openings and/or enroll to have a personal career search that will alert her when a position she describes arises.

World Wide Web address:
http://findjob.womenconnect.com/search.htm